ONTARIO 360 – RESOLVING HEALTH INEQUALITIES – TRANSITION BRIEFING

A promising strategy for providing equal opportunities to health for all Ontarians

Issue

Despite decades of government effort to eliminate health inequalities between richer and poorer Ontarians, these inequalities have persisted for most health outcomes and widened for others.[1] In other words, opportunities to be healthy in the province of Ontario remain as unequally distributed today as ever.

The overall problem seems to be a misguided investment strategy – a strategy whose failure could have been predicted given our available scientific evidence. The vast majority of our time, money, and other resources have gone towards developing programs that we hope will educate or otherwise guide people with less income to make healthier choices – from those that encourage breastfeeding of infants to those that communicate healthy eating habits.[2] Meanwhile, the incomes, employment security, and other socioeconomic conditions of the poor – what a very large body of science understands as the root causes of our health behaviours[3] – have remained largely unchanged or even worsened in the province.[4] To put it directly, no program that aims to teach parents how to make healthy food choices can compensate for the rising levels of poverty in Ontario that leave parents with little income to buy nutritious foods. No such program can outdo the stresses and time constraints of juggling multiple jobs that leave families with little time and energy to focus on much besides just getting by. Or to put it more directly:

1 Ontario Ministry of Health and Long-Term Care. (2018). Improving the Odds: Championing Health Equity in Ontario. Toronto, ON: Ontario Ministry of Health and Long-Term Care.
2 Baum F, Fisher M. (2014). Why behavioural health promotion endures despite its failure to reduce health inequities. Sociology of Health & Illness, 36(2):213-225.
3 Braveman P, Gottlieb L. (2014). The social determinants of health: it's time to consider the causes of the causes. Public Health Reports, 129(S2):19-31.
4 Block S. (2017). Losing Ground: Income Inequality in Ontario, 2000-2015. Ottawa: Canadian Centre for Policy Alternatives. Government of Ontario (2018). Poverty Reduction Strategy (Annual Report 2017).

Ontario 360
School of Public Policy & Governance
14 Queen's Park Cres. West
Toronto, Ontario, M5S 3K9, Canada

on360.ca | ontario.360@utoronto.ca

School of Public Policy & Governance
UNIVERSITY OF TORONTO

the ultimate solution to health inequalities is realizing broader economic and social equality.

The health gap in Ontario results in millions of dollars in health care costs and in lost human capital.[5] It is also terribly unfair that people's chances for health are tied – from the very beginning of life – to their economic status. The incoming government must shift course and invest its resources in providing economic security for all Ontarians as a way to finally resolve this problem. This can be achieved by policy moves in three areas: (1) labor market conditions, (2) income assistance and, (3) wealth redistribution.

Overview

The powerful relationship between income and health has been documented for nearly two centuries.[6] We have long known that a person's economic position is the strongest predictor of their health status. Being poorer means being sicker and dying sooner. There are countless mechanisms through which this happens. It happens because when we are poorer, we are more susceptible to harmful health-related behaviours. It happens because when we lack income, we are compromised in our access to basics such as good housing conditions, and nutritious foods. Importantly, having less income also increases our experiences of stress and adversity, which research demonstrates literally get under our skin and harm not only our mental health, but also our physical health. In fact, what research has shown is that economic conditions underlie almost every pathway leading to almost every health outcome.[7]

5 Rosella LC, Fitzpatrick T, Wodchis WP et al. (2014). High-cost health care users in Ontario, Canada: demographic, socio-economic, and health status characteristics. BMC Health Services Research, 14:532.
6 Commission on Social Determinants of Health. (2008). Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health. Geneva: World Health Organization.
7 Phelan J, Link B, Tehranifar P. (2010). Social conditions as fundamental causes of health inequalities: theory, evidence, and policy implications. Journal of Health and Social Behaviour, 51(S1), 28-40.

Indeed, federal and provincial public health agencies, including Public Health Ontario and Canadian Institute for Health Information have documented troubling longstanding health inequalities in Ontario.[8,9]

The need for reform

In the early 2000s, the Government of Ontario was moved to action by evidence that our society too exhibits income-related health inequalities. Their response mainly consisted of programs and services targeted at producing change in health behaviours amongst low-income individuals. As their follow-up reports suggests, however, rather than achieving strides towards the goal of health equity, health inequalities have widened or stayed the same.[10]

As puzzling a finding as this appears to be, the context of science provides an understanding of why these programs failed to improve the health of those in poverty. At the heart of the issue are two important reflections. First, public health programs that are designed to encourage people to alter their lifestyles and behaviours simply do not address the myriad other associations between economic position and health status. Attempts to address any one problem do little to fundamentally interrupt the overall correlation. Second, because public health programs do not address the root cause of economic insecurity, they are incapable of stemming the tide of new individuals that develop poor health-related behaviours. No sooner has one cohort been exposed to a health promotion program than another cohort is ready and waiting.

Moreover, during the same period, lower income Ontarians experienced rising levels of economic insecurity. Incomes stagnated, with real median wages hovering at or around $20 per hour since 1997.[11] Income inequality widened such that the poorest half of Ontarians saw their share of total earnings shrink

[8] Public Health Ontario. (2013). Summary Measures of Socioeconomic Inequalities in Health. Toronto, ON: Public Health Ontario.
[9] Canadian Institute for Health Information. (2016). Trends in Income-Related Health Inequalities in Canada. Ottawa, ON: Canadian Institute for Health Information.
[10] Ontario Ministry of Health and Long-Term Care. (2018). Improving the Odds: Championing Health Equity in Ontario. Toronto, ON: Ontario Ministry of Health and Long-Term Care.
[11] Hennesy T, Tiessen K, Yalnizyan A. (2013). Making Every Job a Good Job: A Benchmark for Setting Ontario's Minimum Wage. Ottawa, ON: Canadian Centre for Policy Alternatives.

from 22% in 2000 down to 19% in 2015.[12] Precarious forms of employment have become more prevalent, with nearly one third of working Ontarians now holding a job that deviates from the standard model of full-time, permanent employment.[13] At the same time, the cost of basic goods and services such as food and housing has risen tremendously. Data from 2014 compiled by the Ontario Non-Profit Housing Association, for example, suggests that the maximum rent that a fulltime worker earning minimum wage could afford is $572, yet the average market rent for a one-bedroom apartment is $1,067.

It is clear that traditional public health approaches to resolving health inequalities are not going to work. In order to eliminate health inequalities, Ontario must improve the economic security of Ontarians.

How to move forward

We recommend the following policy strategies for eliminating health inequalities, and thereby reducing health care costs, improving human capital in Ontario, and creating a just society that provides equal opportunities for all to be healthy.

1. Labor Market Reforms. It is clear that job insecurity and low wages must be addressed. While government effort to provide Ontarians with a living wage will be helpful in this regard, in fact current economic realities demand much bolder policies. In the United States, a 'job guarantee' program has been proposed to help address these problems.[14] Such a program would end involuntary unemployment through government funding of jobs that pay a living wage and offer basic benefits to employees. It would also introduce labor market competition, thereby promoting higher wages, better benefits, and more favourable working conditions for low-wage workers. A short-term action could involve a pilot program, similar to the current Guaranteed Annual Income pilot, to test behavioural effects, fiscal

[12] Block S. (2017). Losing Ground: Income Inequality in Ontario, 2000-2015. Ottawa: Canadian Centre for Policy Alternatives.
[13] Mitchell CM, Murray JC. (2017). The Changing Workplaces Review – Final Report. Toronto, ON: Ontario Ministry of Labour.
[14] Paul M, Darity W, Hamilton D et al. (2017). Returning to the Promise of Full Employment: A Federal Job Guarantee in the United States. Oakland, CA: Insight Center for Community Economic Development.

costs, and interaction with other labour market dynamics associated with a job guarantee program.

2. Income Assistance Reforms. Over the past several decades, Ontario's social safety net has dwindled and does not enable individuals to meet the demands of today's cost of living. Social assistance rates have declined in real terms.[15] Exacerbating this, fewer and fewer jobless workers are eligible for federal unemployment benefits.[16] While a job guarantee would go a long way in redressing the problem of economic inequality, a broader safety net should be available to individuals out of the labour force or in between jobs who also require income assistance. In the short-term, the incoming government should enhance Ontario's income assistance program and subject it to regularized review to ensure these programs keep up with the cost of living.

3. Wealth Redistribution Reforms. A striking finding in the economics literature is that intergenerational transfers of wealth – gifts or inheritances from parents and other family members that, for example, are used to pay for education and put down payments on homes – are a major source of economic inequality. Across generations, the poor fall further and further behind the rich because their families have no wealth to transfer to them. In fact, wealth inequality may be even more problematic than income inequality. This does not even account for unequal non-financial endowments such as family connections or social networks.

   Another proposal from the United States suggests that governments ought to invest in progressive bond programs, such that every baby born receives an amount (corresponding to need) that accumulates as they grow up and results in a stock of wealth in adulthood.[17] This would work towards ensuring that different financial endowments are minimized and that individuals are able to pursue their own goals and priorities according to merit rather than due to unequal opportunity.

---

[15] Tiessen K. (2016). Ontario's Social Assistance Poverty Gap. Ottawa, ON: Canadian Centre for Policy Alternatives.
[16] Davis M. (2012). Workers Left Outside the EI Umbrella: Explanations and a Simple Solution. Toronto, ON: Mowat Centre.
[17] Hamilton D, Darity W, Price AE et al. (2015). Umbrellas Don't Make it Rain: Why Studying and Working Hard Isn't Enough for Black Americans. Durham, NC: Duke Center for Social Equity.

The policy solutions we have proposed are bold, but necessary. The problem of health inequalities is only growing and is costing Ontario dearly. The good news is that we have solutions, and we hope the next government will advance them.

Arjumand Siddiqi is Canada Research Chair in Population Health Equity and Associate Professor at the Dalla Lana School of Public Health, University of Toronto

Faraz Vahid Shahidi is a doctoral candidate in the Division of Social and Behavioural Health Sciences at the Dalla Lana School of Public Health, University of Toronto

Thriving in the City: What does it cost to live a healthy life?

Nishi Kumar, Kwame McKenzie, Seong-gee Um

Wellesley Institute
advancing urban health

September 2017

Wellesley Institute works in research and policy to improve health and health equity in the GTA through action on the social determinants of health.

Thriving in the City: What does it cost to be healthy? | Wellesley Junior Fellowship Report

Copies of this report can be downloaded from www.wellesleyinstitute.com.

Statement on Acknowledgement of Traditional Land
We would like to acknowledge this sacred land on which the Wellesley Institute operates. It has been a site of human activity for 15,000 years. This land is the territory of the Huron-Wendat and Petun First Nations, the Seneca, and most recently, the Mississaugas of the Credit River. The territory was the subject of the Dish With One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes.

Today, the meeting place of Toronto is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work in the community, on this territory.

Revised by the Elders Circle (Council of Aboriginal Initiatives) on November 6, 2014

10 Alcorn Ave, Suite 300
Toronto, ON, Canada M4V 3B2
416.972.1010
contact@wellesleyinstitute.com

Wellesley Institute
advancing urban health

Introduction

Recently released census data reveals that while incomes across Canada have increased in the past decade, progress in Ontario and in Toronto have lagged behind.[1] As Ontarians have become increasingly concerned with issues of housing affordability and precarious job markets, the province has responded with a suite of policy changes, including reforms to employment legislation and social assistance. Many of these policies focus on getting people to a level of income adequacy that allows them to meet their basic needs, like food and shelter. However, Wellesley Institute recognizes that in order to achieve health equity, policy-makers must adopt a broader definition of health that goes beyond basic needs and strives towards conditions that allow everyone to truly thrive.

The ability to thrive involves more than just physical health. Social and economic needs are important facets of health and well-being that are often overlooked in current policy approaches. *Thriving in the City: A framework for income and health*[2] argues that connecting with ones' community and family, investing in education and employment, and building financial security are essential for achieving good health across the life course. It also provides an evidence-based framework that defines individuals' needs across physical, mental, social, and economic dimensions of health and well-being.

Building on that framework, this paper assesses what it costs to thrive in the Greater Toronto Area (GTA). The framework is divided into nine components with specific items in each and costs are estimated for each item. In doing so, this highlights how the collective responsibility for creating a thriving city is shared: individuals, communities, employers, and public services each play a role in creating a social environment that allows people to live full, healthy lives.

Research Aims

The Thriving in the City project, as a whole, aims to answer the following questions:

1. What constitutes "thriving" with respect to key dimensions of physical, mental, and social health?
2. What goods, resources and services are required for a person to "thrive"?
3. How much does it cost to thrive in the GTA?

The first two research questions are addressed in the first Thriving in the City[2] report. The third question, giving an estimate of the total compensation required to support people to thrive in the GTA, is addressed here.

This project focuses on single working-age people age 25-40, without significant disabilities or chronic conditions, who live in the GTA. A forthcoming report by Wellesley Institute will explore the Thriving in the City framework for older adults. Individuals with disabilities or

chronic conditions, or those with families, have different needs, and these will be addressed in future iterations of this work.

Methods

An evidence review determined parameters for achieving good health in nine domains: food, shelter, transportation, health care, personal care, physical activity, social participation, professional development, and savings/debt. These parameters led to more specific requirements, using secondary survey data to tailor the requirements to a GTA context. The framework was then presented to two focus groups in Toronto and Mississauga to ensure its acceptability and relevance for GTA residents in the 24-40 age range. A more detailed explanation of methodology for developing the framework is explained in the first report.

Building on the initial framework, this paper aims to define the costs of thriving in the GTA. To achieve this, we have estimated the costs of each requirement listed in the framework. The information presented in this report cannot account for the subjective preferences and circumstances of each individual, and does not purport to describe an ideal way of living. Instead the estimates are grounded in hypothetical scenarios guided by norms in the GTA and Canada, within the parameters of the requirements descried in the *Thriving in the City* framework.

The estimates presented here assume that a person is not eligible for means-tested benefits and does not receive significant benefits from their employer, but does have access to publicly available services. In addition, these estimates cannot adequately capture the cost of thriving across the entire GTA. As highlighted in previous focus groups, there are distinct needs and norms in urban and suburban regions, particularly with regards to housing and transportation needs. To account for these distinctions, the estimates include two scenarios: one for a renter without a car living in downtown Toronto, and another for a homeowner with a car living in Mississauga.

For goods and commercial services, the costs are largely drawn from major stores or suppliers or from online price estimator tools. Using price estimator tools necessitates some assumptions which are described in the tables. For more variable costs such as housing and utilities, the costs are drawn from market data and consumer surveys. When no other options were available, costs were drawn from expenditure surveys although these can reflect spending habits that are often constrained by inadequate incomes. Expenditure data were mainly drawn from the Survey of Household Spending (SHS) conducted by Statistics Canada, using a custom tabulation with only single-person households in Ontario broken down by tenure type where possible.[3] Focus group feedback informed the frequency and type of items listed in each domain. The items, cost estimates, and rationale for cost estimates is described below for each of the nine domains. Detailed rationale for the inclusion of each domain is available in the first report.

Cost Estimates

Food and Nutrition: $3,605 per year

The *Nutritious Food Basket* tool, developed by Health Canada in alignment with *Canada's Food Guide*, was used to estimate the costs of groceries.[4] Toronto Public Health uses the tool to monitor food costs annually for different populations and household structures. The estimated monthly costs for men and women aged 19-30 were averaged and calculated on a yearly basis. In addition, this component includes costs for foil and paper supplies required for food preparation, drawn from the SHS.

Groceries	$3,415 ($247-$341 per month)	Nutritious Food Basket Estimate, Toronto Public Health 2016. Average for women and men age 19-30.[4]
Food prep supplies	$190	"Paper, plastic & foil supplies" in SHS, Statistics Canada 2015.[3]

Shelter: $14,225 – $21,926 per year

The shelter component of the framework includes two scenarios: one for a renter in Toronto, and one for a homeowner in Mississauga, reflecting the norms for this age group in both cities. Both scenarios account for the cost of a small studio unit in a moderately walkable neighbourhood. Walkability was determined using the *WalkScore* real estate tool; neighbourhoods with a score of 50/100 or higher were considered acceptable, which is the case for most of central Toronto and Mississauga.[5] The rental rates for central Toronto are drawn from annual surveys conducted by Canada Mortgage & Housing Corporation and generally include utility costs. The mortgage rates are drawn from Condos.ca data, indicating that the average price for the least expensive 10 percent of units last year was $216,000. The mortgage calculation assumes a 10 percent down payment, a 25-year amortization period and 3 percent interest rate.

Scenario 1: Renter, City of Toronto

Rent (including utilities)	$13,056 ($1,336 per month)	Average bachelor/studio apartment rent for central Toronto Zone 1. Greater Toronto Area Rental Market Report, Canada Mortgage & Housing Corporation 2016.[6]
Equipment	$313	"Household Equipment" in SHS, Statistics Canada 2015. Renters only.[3]
Furnishings	$651	"Furnishings" in SHS, Statistics Canada 2015. Renters only.[3]
Insurance	$204	Quote from SquareOne Insurance. Includes $20,000 personal property insurance and $1 million liability insurance.

Scenario 2: Homeowner, Mississauga

Mortgage	$11,412 ($951 per month)	Estimate from Condos.ca. Studio unit with $21,6000 listing price, 10% down, and 25-year amortization at 3% interest.[7]
Utilities	$1,248	"Utilities" in SHS, Statistics Canada 2015. Adjusted downward to 50% of average to account for small housing size. Owners only.[3]
Equipment	$781	"Household Equipment" in SHS, Statistics Canada 2015. Owners only.[3]
Furnishings	$833	"Household Furnishings" in SHS, Statistics Canada 2015. Owners only.[3]
Repairs & maintenance	$742	"Repairs & maintenance of owned living quarters" and "Service related to household furnishings & equipment" in SHS, Statistics Canada 2015. Owners only.[3]
Condo fees	$3,540	Estimate from "Toronto Condo Maintenance Fee Stats," Condos.ca 2015. Assumes 500 square foot unit.[8]
Property taxes	$1,835	Estimate from City of Mississauga property tax rates 2017. Assumes home value of $216,000.[9]
Homeowner's insurance	$312	Quote from SquareOne Insurance. $20,000 personal property insurance and $1 million liability insurance.

Transportation: $2,400 – $6,414 per year

The transportation component of the framework includes two scenarios: one for a transit user in central Toronto and one for a car user in Mississauga. This reflects trends in car ownership across the GTA.[10] For transit users, the cost of a monthly Metropass is included. To supplement this, the costs of a car sharing membership, a three-day car rental, coach fare, GO transit fare, and Union-Pearson express fare, and occasional taxi trips are also included.

The cost of car payments is based on the typical low-end listed price of a Honda Civic on Autotrader.ca. The car payment calculation assumes a purchase price of $10,000 purchase price with 10 percent down and a 5-year term with 3 percent interest. Car repairs, maintenance, and gas are estimated using CAA Car Costs tools and reports, assuming 12,000-15,000 kilometres driven per year. Parking fees are drawn from Condos.ca survey data and typical costs for Green P public lots in Toronto. In addition to the costs of a car, there are additional costs for occasional transit and taxi fare.

Scenario 1: Transit User, City of Toronto: $2,400

Transit	$1,716	Adult TTC Metropass and 1 round-trip Union Pearson Express fare.
Car share	$238	ZipCar fees and 12 2-hour trips in low-cost car option.
Regional travel	$266	Enterprise 3-day car rental and insurance, MegaBus round trip to Montreal, and GO Transit round trip to Niagara Falls.
Taxi	$180	Quote from Toronto Fare Finder. Includes 12 5km taxi trips.

Scenario 2: Car User, Mississauga

Car payments	$1,944	Estimate from Autotrader.ca. Honda Civic 2012 model. $10000 purchase price, 10% down payment, and 5-year term with 3% interest.[11]
Car insurance	$2,172	Quote from Pembridge Insurance. 30-year-old driver in Mississauga with Honda Civic 2012 model.
License & registration	$138	License plate sticker and 5-year license fees for Southern Ontario.
Repairs & maintenance	$483	Estimate from CAA Driving Costs Report 2012. Honda Civic 2012 model with 12,000-15,000km driving per year.[12]
Gas	$929	Estimate from CAA Driving Costs Calculator. Honda Civic 2012 model with 12,000-15,000km driving per year.[13]
Condo parking	$516	Estimate from 'Toronto Condo Maintenance Fees Stats,' Condos.ca 2017.[7]
Lot/street parking	$48	6 day passes for downtown Green P parking lots.
Transit	$94	6 round-trip TTC fares and 1 round-trip Union Pearson Express fare.
Taxi	$90	Quote from Toronto Fare Finder. Includes 6 5km taxi trips.

Physical Activity: $562 per year

The physical activity component of the framework includes costs of a community fitness centre membership in Toronto or Mississauga and repairs and maintenance for a bicycle. Community fitness centres offer access to a wide range of activities such as swimming, group fitness classes, and drop-in sports, while also offering a chance for socializing. Cycling is also a common outdoor leisure activity among Canadian adults, and can be an effective form of transportation for some short trips.

Fitness centre membership	$492	Type B Adult Membership for City of Toronto Recreation Centre.
Bicycle maintenance	$70	Quote from Canadian Tire for basic tune-up and flat tire replacement.

Health Care: $2,179 per year

The health care component includes a comprehensive health insurance package including dental care, vision care, drug coverage, accident insurance, travel insurance, and extended benefits such as physiotherapy. Basic health coverage is not included as it is assumed that a person is eligible for OHIP. There are additional costs allocated to over-the-counter health products such as medicines and first aid supplies.

Extended health insurance	1,860	Quote from Manulife Insurance for Enhanced Coverage for healthy 30-year-old in Ontario.
Over-the-counter products	319	Non-prescribed medicine and healthcare supplies' in SHS, Statistics Canada 2015.[3]

Personal Care & Hygiene: $1,826 per year

Costs for personal care and hygiene were drawn from the Survey of Household Spending. To estimate the costs of clothing, the cost is the average for men and women.

Clothing	776	"Women & Girls Wear" and "Men & Boys Wear" in SHS, Statistics Canada 2015. Average for women and men. [3]
Toiletries	858	"Personal care products" and "hair grooming services" in SHS, Statistics Canada 2015.[3]
Cleaning supplies	129	"Household cleaning supplies & equipment" in SHS, Statistics Canada 2015.[3]
Laundry	63	"Laundry & dry-cleaning services" in SHS, Statistics Canada 2015.[3]

Social Participation: $5,996 per year

The social participation component encompasses a range of activities that support mental health and allow people to connect with family, friends, and community. These include hobbies, social outings, charity and civic contributions, telecom services, and travel. Compared to the other components, social participation is the most subjective. Each individual has distinct preferences for types of activities. However, the items are examples of popular activities as discussed in focus groups and Statistics Canada's General Social Survey. The costs were primarily drawn from the Survey of Household Spending and other expenditure surveys or listed retail/service prices. For some highly variable items, such as restaurant meals and flights, the typical cost was estimated based on a range of options listed online. International flight destinations were chosen based on the most common countries of origin for immigrants in the GTA (China, India and the Philippines).

Books	50	"Books" in SHS, Statistics Canada 2015.[3]
Magazines/ newspapers	176	Toronto Star 1-year digital subscription
Music	50	"Music downloads" in SHS, Statistics Canada 2015.[3]
Creative projects	200	Typical cost from Curry's Art Supply for canvas, paints, and brushes.
Cultural outings	366	2 Art Gallery of Ontario passes; 2 Toronto Symphony Orchestra tickets; 2 Royal Ontario Museum passes; 2 Blue Jays tickets; 2 Cineplex movie tickets; 2 local concert tickets
Special occasions	240	Typical additional cost of entertaining family or friends at home monthly. (Supplement to regular food component).
Gifts	558	Average holiday gift expenditures in Ontario. Holiday Outlook Report, BMO 2015.[14]
Restaurant outings	1,040	Typical cost from Toronto Life Restaurant Listings for 1 weekly sit-down meal in low- to mid-price range.

Charity contributions	531	"Charitable donations" in SHS, Statistics Canada 2015.[3]
Civic contributions	200	Typical cost of membership fees for local service club.
Internet	420	Tekksavy 15mbps wireless internet plan.
Phone	552	Freedom Mobile 2g smartphone plan.
TV/movies	96	Netflix streaming subscription.
Provincial travel	124	Ontario Parks 3-night campsite rental. (Transportation and food included in relevant components).
Domestic travel	193	Quote from Expedia.ca for 3-night stay in private hostel room in Montreal; plus weekend tourist pass. (Transportation and food included in relevant components.)
International travel	1200	Typical cost from Google Flights for round-trip airfare to China/India/Philippines.

Professional Development: $2,492 per year

The professional development component includes expenses for ongoing training, equipment, and networking. It does not include the costs of postsecondary education which is captured under the Savings/Debt component. Certification, professional membership, and equipment costs can vary substantially depending on professional field; these estimates use common examples from each category. Additional training and adult education resources may be available for free through local libraries and employment centres.

Certifications	310	St. John's Ambulance first aid and mental health first aid certification course.
Training	800	Full course from Continuing Education programs at Ryerson, University of Toronto, or George Brown College.
Professional membership	450	Toronto or Mississauga Board of Trade individual membership.
Conference	300	Typical cost from Eventbrite for local industry conference or symposium.
Software	70	Microsoft Office personal software suite.
Hardware	250	Typical cost from BestBuy for mid-range Asus laptop repair and upgrades.
Networking	312	LinkedIn Premium online networking membership.

Savings & Debt: $11655 - $12901 per year

The Financial Consumer Agency of Canada's savings guidelines were used to estimate costs for the general savings, retirement savings, and debt repayment.[15] The component again includes two scenarios for renters and homeowners, recognizing that homeowners have home equity to draw on for retirement. For both groups, general savings are calculated based on 10 percent of overall expenses, i.e. the sum of all other categories. Retirement savings for homeowners are an additional 10 percent of overall expenses; the proportion is adjusted to

20 percent for renters to account for a lack of home equity. (This does not include mandatory CPP contributions). Student debt is also included. The majority of Ontario graduates have some amount of student debt. Debt repayments were calculated using the average debt load of $21,586 (for those completing 4-year degrees between 2005-2013) and average repayment time of 9.5 years.

Scenario 1: Renter, City of Toronto

General savings	3,344	10% of annual expenses less debt.
Retirement savings	6,689	20% of annual expenses less debt. Adjusted upwards from 10% to account for lack of home equity.
Debt repayment	2,868	Average repayable OSAP debt. Government of Ontario 2014.[16] Repayment time of 10 years.[17]

Scenario 2: Homeowner, Mississauga

General savings	4,394	10% of annual expenses less debt.
Retirement savings	4,394	10% of annual expenses less debt.
Debt repayment	2,868	Average re-payable OSAP debt. Government of Ontario 2014.[16] Repayment time of 10 years.[17]

Discussion

Based on these estimates, the cost of thriving is between $46,186 and $55,432 after tax for a single person age 25-40 living in the Greater Toronto Area. This figure indicates total cost of supporting an individual's ability to thrive, which is defined as meeting their basic material needs, enabling connections to community and family, supporting educational and professional advancement, and ensuring long-term financial security. Each of these factors support peoples' health and well-being across the life course.

This figure demonstrates the gap between current income levels and one that would allow people to thrive. It is well above the income level for a current Ontario minimum wage worker, which would amount to approximately $20,000 after taxes. A future minimum wage worker earning $15 per hour would still fall well short of this figure, with an after-tax income of approximately $25,500, just half of what it costs to thrive. The most substantial costs are associated with shelter, savings and debt. While there may be room for adjustment in personal spending based on an individual's preferences (for example, forgoing restaurant meals or gym memberships), such changes amount to a small proportion of the overall cost, and are unlikely to close this substantial gap.

However, this figure does not have to indicate an ideal take-home income or wage for an individual. Instead, it illustrates the total resources required to live a healthy life in the GTA. This benchmark could be met through raising incomes. However, it can also be met through other supports including public services, social programs, employer-sponsored benefits, and community facilities. The responsibility for supporting peoples' ability to thrive can be shared between individuals, employers, communities, and broader society.

The framework assumes that a person is able to access only current universally-available services and supports from public institutions. These supports help to contain the costs in the framework. For example, the costs for health care and savings for retirement are far lower than they would be in the absence of publicly-funded social programs like OHIP and CPP. Community services such as local libraries and community centres offer a host of in-kind services, which means that the costs for leisure activities and physical activity are significantly lower than they would be otherwise.

Moving forward, there is a need to re-consider how other players can contribute to peoples' well-being. For example, if an employer provided comprehensive health benefits, supported professional development opportunities with an annual fund, and offered a modest RRSP matching program, the overall figure could be reduced by over $5000. Changes in public services and social programs would similarly change the amount of income a person needs to thrive. For example, provincial investment towards post-secondary tuition grants would reduce debt burdens; federal investment in affordable housing would reduce shelter costs; and local investment in transit could make transit more affordable. Such investments would help close the gap between what GTA residents are earning and what they need to live full, healthy lives.

This how individual income is only one component of a broader social safety net that supports a thriving population. While raising wages and strengthening social assistance is a critical step towards improving quality of life for Ontarians, there is a need to consider how other supports can contribute to peoples' ability to thrive. Individuals, communities, employers, and governments across all levels have a role to play. These players share responsibility for supporting a physically, socially, and economically healthy population. This cost of thriving provides a way to understand the gap between the current environment and one that allows everyone to thrive, and can be a starting point for a broader conversation about what is really needed to improve health and health equity in the GTA.

Endnotes

1. Income Highlight Tables, Canadian Census. Statistics Canada, 2016. [Ontario and Toronto CMA non-census-family households by median income.] Retrieved from: http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/hlt-fst/inc-rev/Table.cfm?Lang=Eng&T=107&SR=26&S=88&O=A&RPP=25&PR=35&CMA=0&CSD=0&D1=9&D2=1

2. Kumar, N. Thriving in the City: A Framework for Income and Health. Wellesley Institute, 2016. Retrived from: http://www.wellesleyinstitute.com/publications/thriving-in-the-city-a-framework-for-income-and-health/

3. Survey of Household Spending. Statistics Canada, 2015. [Custom tabulation: Ontario single-person households by tenure type].

4. Nutritious Food Basket Calculator. Toronto Public Health, 2016. Retrieved from: http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=5bc0ce7e2b322410VgnVCM10000071d60f89RCRD

5. WalkScore: Toronto & Mississauga Neighbourhoods. WalkScore, 2017. Retrieved from: https://www.walkscore.com/CA-ON/Toronto

6. Rental Market Report: Greater Toronto Area. Canada Mortgage & Housing Corporation 2016. Retrieved from: https://www.cmhc-schl.gc.ca/odpub/esub/64459/64459_2016_A01.pdf?fr=1498837385963

7. Average Condo Sale Prices, Mississauga. Condos.ca, 2017. Retrieved from: https://condos.ca/peel/mississauga

8. Toronto Condo Maintenance Fees: Stats, Myths, and Facts. Condos.ca, 2016. Available from: https://condos.ca/blog/breaking-news-toronto-condo-maintenance-fees-revealed/

9. Mississauga Multi-Residential Tax Rates. City of Missisauga, 2017. Retrieved from: http://www.mississauga.ca/portal/residents/taxrates

10. National Household Survey. Statistics Canada, 2011. [Percentage of Toronto CMA labour force using a car, truck, or van to get to work. . Retrieved from: http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/map-carte/pdf/2011-99012-005-535-013-07-01-eng.pdf

11. 2012 Honda Civic Overview. Autotrader.ca, 2016. Retrieved from: http://wwwb.autotrader.ca/research/honda/civic/2012/

12. Driving Costs Report: Beyond the Price Tag. Canadian Automobile Association, 2012. Retrieved from: https://caa.ca/docs/eng/CAA_Driving_Costs_English.pdf

13. Driving Costs Calculator. Canadian Automobile Association, 2017. Retrieved from: http://caa.ca/car_costs/

14. Holiday Outlook Report. BMO, 2015. Retrieved from: https://www.theglobeandmail.com/globe-investor/news-sources/?mid=ccnm.20151119.201511191033587001

15. Your Financial Toolkit. Financial Consumer Agency of Canada, Government of Canada, 2015. Retrieved from: https://www.canada.ca/en/financial-consumer-agency/services/financial-toolkit.html

16. Average OSAP debt. Ontario Open Data Catalogue, Government of Ontario, 2014. Retrieved from: https://www.ontario.ca/data/average-osap-debt

17. OSAP Repayment Calculator. Ministry of Advanced Education and Skills Development, Government of Ontario, 2017. Retrieved from: https://osap.gov.on.ca/AidEstimator1718Web/enterapp/debt_calculator.xhtml

Thriving in the City: A Framework for Income and Health in Retirement

Seong-gee Um, Nishi Kumar, Nazeefah Laher,
Sukhmeet Singh, Arman Hamidian, Kwame McKenzie

Wellesley Institute
advancing urban health

May 2018

Wellesley Institute works in research and policy to improve health and health equity in the GTA through action on the social determinants of health.

Thriving in the City: A Framework for Income and Health in Retirement | Report

Copies of this report can be downloaded from www.wellesleyinstitute.com.

Statement on Acknowledgement of Traditional Land
We would like to acknowledge this sacred land on which the Wellesley Institute operates. It has been a site of human activity for 15,000 years. This land is the territory of the Huron-Wendat and Petun First Nations, the Seneca, and most recently, the Mississaugas of the Credit River. The territory was the subject of the Dish With One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes.

Today, the meeting place of Toronto is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work in the community, on this territory.

Revised by the Elders Circle (Council of Aboriginal Initiatives) on November 6, 2014

10 Alcorn Ave, Suite 300
Toronto, ON, Canada M4V 3B2
416.972.1010
contact@wellesleyinstitute.com

Wellesley Institute
advancing urban health

TABLE OF CONTENTS

Introduction

Achieving a healthy population requires that governments and institutions invest in the social determinants of health to create an environment where all people in Canada can truly thrive.

Wellesley Institute's *Thriving in the City*[1] framework is a valuable tool for understanding what resources an individual needs to live a healthy life and assessing how the current policy environment meets these needs. While the previous report focused on working-age adults (25-40 years old),[2] this report focuses on the needs of retired older adults (65-74 years old) in the Greater Toronto Area (GTA).

Older adults face distinct health challenges as they age, such as a higher risk of chronic disease, more limited capacity to complete activities of daily living,[3] and social isolation.[4] In addition retired older adults may not be able to add to their income or replace losses. Canada's retirement income system ensures a certain level of income security to most citizens upon retirement.[5] There are three components: (1) Old Age Security (OAS); (2) Guaranteed Income Supplement (GIS); and, (3) the Canadian Pension Plan (CPP).

OAS and GIS offer a universal minimum income to older Canadians. CPP are compulsory earnings-based contributions by employees and employers, which offer a basic level of earnings replacement for workers. These may be supplemented by voluntary private savings, such as Registered Retirement Savings Plans (RRSP) or Tax-Free Savings Accounts (TFSA), which offer tax benefits to encourage Canadians to accumulate additional savings for retirement. Older adults are also eligible for a range of provincial and local programs that support health, such as the Ontario Drug Benefit and subsidized transit services.

Canada's retirement system has two key overarching objectives: (1) to ensure a minimum level of income in order to reduce poverty, and (2) to provide Canadians with sufficient resources to enable a predictable, adequate replacement of income during the transition between work and retirement.[6] This system has been largely viewed as successful, with Canada having a low rate of older adults living in poverty compared to other nations.[7] However, there is increasing public concern that Canadians are not saving enough to fund their retirement, and this challenge is exacerbated by the decline in employer-sponsored pensions and longer life expectancies.[9] Recent census data demonstrates that between 2005 and 2015, low-income Canadian seniors increased from 12 percent to 14.5 percent of the overall population.[8]

In current policy rhetoric, retirement income adequacy is often measured in terms of replacement rates, which describes the proportion of pre-retirement income received. However, such a metric does not attempt to measure what a retired person actually needs. If there is broad recognition that everyone in Canada should be able to achieve their full health potential, then adequacy of post retirement income can be usefully linked to the best attainable physical, mental, and social well-being.

Thriving in the City: A Framework for Income and Health in Retirement draws on extensive evidence on the health of older adults. The framework identifies the goods, resources, and services required for a retired person to thrive. It introduces a new paradigm for understanding the connections between income and health and offers a lens through which to consider policy opportunities that support healthy aging. In doing so, this framework brings health and well-being to the forefront of the discussion about the needs of older adults.

In this paper, we (1) describe the methodology for developing the framework, (2) describe the components of the framework and their relevance for health and well-being and (3) discuss the implications of this framework with respect to retirement policy in Ontario and Canada.

Approach

Research Approach

The Thriving in the City project describes: a) what constitutes "thriving" with respect to key dimensions of physical, mental, and social health; and b) what goods, resources, and services would be required for a person to "thrive."

This component of the project is focused on older adults aged 65-74, who are retired and live independently in the GTA. The report focuses on older adults without significant limitations in the activities of daily living.

75 percent of Canadian older adults experience at least one chronic condition[9, 10] and many would still consider themselves 'in good health'. This framework takes into account minor health concerns that are common with aging and do not significantly limit an individual's activities of daily living. Individuals with significant activity limitations and those who require extended health care services such as long-term care have a distinct set of needs that are not addressed in this framework. Moreover, this framework is meant to be descriptive rather than prescriptive. It offers an example of a healthy life in retirement, but of course individuals have a diversity of needs and preferences that cannot be appropriately captured in a single framework.

The framework for older adults offers a complement to the previous framework designed for working adults age 25-40 in the GTA. The previous framework emphasized building financial security and investing in education and career development as important needs for younger adults. The framework presented here assumes that an individual has been able to financially prepare for retirement, and so is entering retirement with substantial savings and without debt. However, in recognition that health needs are often unpredictable, the framework does account for some contingencies that may be required.

Previous Work

The *Thriving in the City* framework is based on the Minimum Income for Healthy Living (MIHL) approach developed by Jerry Morris and colleagues in the United Kingdom.[11] This research identifies what an individual needs to achieve optimal health and estimates the financial cost for these needs, with the goal of evaluating the adequacy of current income security policies. Importantly, the MIHL approach is grounded in evidence, drawing from credible research on health and well-being. It also reflects the importance of physical and mental health as well as social and economic well-being. The *Minimum Income for Healthy Living* approach accounts for food, housing, physical activity, social integration, transportation, personal care and hygiene, health services, and savings. Each component includes a proposed list of goods and services required for achieving good health, along with estimated costs. The approach has been applied to single working-age men in the UK,[12] as well as older individuals and couples in the UK[13] and New Zealand.[14] Across studies and jurisdictions, the MIHL has consistently exceeded pensions or social security rates. Wellesley Institute recently applied the approach to younger adults age 25-40 living in the GTA, similarly finding that the total compensation required to thrive far exceeds the compensation provided through employment and social services.[15]

Methods

This work uses an approach similar to the *Minimum Income for Healthy Living* work as well as Wellesley Institute's previous *Thriving in the City* framework. It involves three key steps:

1. *Literature review:* We conducted a review of recommendations about healthy aging with respect to eight key components: food, shelter, transportation, physical activity, health care, personal care, social care, and contingencies. We searched for evidence-based recommendations from credible health institutions with respect to each component of healthy aging. While we attempted to draw from Canadian recommendations (such as those from Health Canada, Public Health Agency of Canada, Canada Mortgage & Housing Corporation and Finance Consumer Agency of Canada), in some cases we turned to international institutions such as the World Health Organization. These recommendations provided general parameters for each component, allowing us to create a clear statement of what "thriving" in retirement should entail.
2. *Constructing initial framework:* For each component, we proposed specific goods, services, and resources that would allow an individual to thrive. In choosing what specific items to include, we sought to represent the most common choice using local and national survey data. While the specific items cannot capture each individual's preferences, the goal was to capture the items that would be considered acceptable or typical in Canada and, where possible, within the GTA.
3. *Focus groups:* We held one focus group in Toronto hosted by the Toronto Seniors' Forum and one in Mississauga hosted by the local chapter of the Canadian Association of Retired Persons. In total, there were 14 people in the focus groups. We asked

participants to consider whether the components and items listed would allow them to achieve good health and truly thrive during their retirement, and prompted them to consider if any components or items were missing or inadequate. We then modified the initial framework to reflect participants' comments.

4. *Stakeholder consultation:* We held a consultation with a group of stakeholders including representatives from government, academia, advocacy organizations, and social and health service providers. Each of the stakeholders had substantial expertise in policy issues facing older adults in the GTA. The goal of the policy consultation was to identify emerging concerns and policy opportunities based on the findings of this research. This consultation informs our discussion here and in forthcoming reports on this research.

It is important to note that the framework does not prescribe an 'ideal' way to thrive in retirement. Different people will have different preferences and priorities when it comes to their health and well-being. Instead, it indicates in a general sense what types of resources, goods, and services would allow for a healthy retirement. The following section describes the eight components of the framework, each with a set of items that reflect what it means to thrive in retirement.

Thriving in the City Framework

Food and Nutrition

Nutrition significantly influences older adults' general health and well-being, affecting sensory functions, cognitive abilities, and chronic disease risk.[16] Older adults are at particular risk of inadequate diet and malnutrition.[17] This component is based on Canada's Food Guide which offers clear guidelines for healthy eating for older adults.[18] For a sample grocery list, we utilize the 2008 *National Nutritious Food Basket* developed by Health Canada,[19] which is aligned with Canada's Food Guide recommendations. We also include the supplies needed to prepare meals from scratch, such as tin foil and food containers. Other cooking equipment like appliances and kitchenware are included in the *Shelter* component.

In addition to groceries, this framework also includes vitamin D supplements. These are recommended for adults over age 50 by *Canada's Food Guide* to promote bone and muscle health, as vitamin D production through the skin becomes diminished with age.[20]

- Groceries
- Food preparation supplies
- Vitamin D supplements

Shelter

Shelter is absolutely necessary for good health; inadequate or unsafe shelter can expose individuals to a range of negative physical and mental health impacts.[21] Standards from

the Canada Mortgage & Housing Corporation[22] state that an acceptable home must be: affordable, meaning it costs less than 30 percent of a household's pre-tax income; adequate, meaning it is not in need of major repairs; and suitable, meaning it is not overcrowded. For a single person, a bachelor unit is considered suitable. We also account for other requirements of an acceptable home like furnishings and appliances, repairs and maintenance, and insurance.

The broader city and neighbourhood environment is also important for promoting healthy aging. The WHO's *Age Friendly City Guidelines* recognize the importance of access to essential services such as community programs, health services, and grocery stores, emphasizing the importance of walkability and good transit access. [23]

Across the GTA, it is far more common for older adults to own their homes rather than rent. However, among single older adults, there are substantial number of renter households (ranging from 26% in York Region to 48% in the City of Toronto).[24] To capture the distinct housing needs of renters and owners, we include both scenarios in the framework. In both cases, we include a small bachelor unit located within a moderately walkable neighbourhood. Given that 59 percent[25] of homeowners in Toronto between the ages of 65 and 74 live in a single detached houses, we added a third scenario to reflect this population. We assume that homeowners are mortgage-free by age 65. We also include other requirements such as condo fees and property taxes for homeowners. Both scenarios would require furnishings, appliances, and repairs/maintenance, although more so for homeowners.

Renter

- Rent for bachelor unit
- Utilities
- Equipment
- Furnishings
- Repairs & maintenance
- Tenant's Insurance

Homeowner (bachelor/studio apartment)

- Utilities
- Equipment
- Furnishings
- Repairs & maintenance
- Condo fees
- Property taxes
- Homeowners insurance

Homeowner (single detached house)

- Utilities
- Equipment
- Furnishings
- Repairs & maintenance
- Property taxes
- Homeowners insurance

Transportation

Reliable daily transportation is necessary for accessing health services, attending community programs, shopping, and visiting family and friends. In Toronto, those with limited transit access are more likely to have poor health outcomes such as diabetes.[26] Some areas of the GTA have limited access to transit, and as a result, many residents rely on private vehicles.[27] In Toronto, focus group participants suggested that they may need a car depending on their proximity to transit. Focus group participants in Mississauga agreed that a car is necessity for their day-to-day lives, as is regional transit to travel to Toronto for special events. The majority of seniors own their own cars.[28] To reflect this reality, we have included two scenarios: one for a transit user, and one for a car owner. For the transit user, we include a monthly public transit pass, taxi fare, and occasional regional transit and car sharing. For the car owner, we include car payments, assuming that a car must be replaced approximately every 10 years. We also include items like insurance, gas, parking expenses, and occasional taxi and transit trips.

Transit user

- Public transit
- Car share
- Regional transit
- Taxi

Car Owner

- Car payments
- Car insurance
- License & registration
- Car repairs & maintenance
- Gas
- Lot/ street parking
- Public transit
- Taxi

Physical Activity

Regular exercise is an important part of healthy aging and can support independent living in older age.[29] Health Canada endorses the *Canadian Physical Activity Guidelines for Older Adults* developed by the Canadian Society for Exercise Physiology.[30] According to the guidelines to achieve health benefits and improve functional abilities, older adults 65 plus should accumulate at least 150 minutes of moderate-to-vigorous intensity aerobic physical activity per week, and add muscle and bone strengthening activities at least 2 days per week. This can help reduce the risk of chronic disease such as high blood pressure, heart disease, and premature death, and help to maintain functional independence, mobility, bone health, and mental health.

In Canada, popular physical activities include walking, gardening, home exercises, swimming, and cycling.[31] Some focus group participants mentioned that they felt safer exercising indoors, particularly in winter when there is a risk of falling. The framework includes a membership to a local community recreation centre, which offers a range of athletic facilities including gyms and swimming pools, exercise equipment, and group classes.

- Fitness centre membership

Health Care

Comprehensive medical care is essential for protecting health throughout the life course, and older adults in particular have high health care needs including drugs, vision, and dental care.[32-33] Older adults in Ontario can access basic health services including vision care through OHIP, and drugs through the Ontario Drug Benefit. However, focus group participants spoke about the limitations of these public coverage options and expressed concern about meeting their health care needs as they age. They estimated that about one-third of their medications were not included under the Ontario Drug Benefit, and also noted that OHIP does not cover many health care items that are commonly needed for older adults. We also recognize that in Canada almost 75 percent of older adults have at least one chronic health condition that may add additional health expenses.[34]

While beyond the scope of this work, we recognize that many older adults will need more extensive health care services and supports as they age. Focus group participants also emphasized the importance of home care and assistance from personal support workers to maintain independence and good health as they aged. While home care and long-term care services are included through OHIP, the services available are often unable to meet the full care needs of the aging population[35] and many may turn to private options. As a result, healthy and independent aging may involve significant costs. However, calculating these costs warrants a more thorough analysis in a separate iteration of this work.

To meet the health care needs of a 65-75 year old adult who lives independently without significant limitations in the activities of daily living, this framework includes a comprehensive health benefits insurance package and additional over-the-counter products.

- Extended health coverage
- Over-the-counter drugs and other health supplies
- Additional expenses from living with a chronic condition

Personal Care

Toiletries, clothing, and cleaning supplies are necessary for maintaining personal and household hygiene. These items limit the spread of disease and are important for maintaining physical health, but also play an important role in facilitating social inclusion and participation.

- Clothing
- Toiletries
- Haircuts
- Household cleaning supplies
- Laundry

Social Participation

Social participation is a particularly important part of a healthy aging process; as people transition out of their professional lives and the nature of their family roles change, they may need to seek out new social activities to meet their psychological and emotional needs. Older adults who engage in social activities frequently (at least weekly) are more likely to report having good health and are less likely to report feeling lonely or dissatisfied with their lives.[36] While people have distinct preferences for the frequency and type of activity, it is important that older adults participate in a range of activities that allow for informal interaction with family and friends, solitary time, and connections to community.[37] The social participation component includes a range of activities that support mental health and reduce social isolation.

Hobbies

Lifelong learning and intellectually stimulating hobbies, like reading, listening to music, or undertaking creative projects can protect against cognitive decline in older age.[38] These activities can be undertaken alone, but can also offer social interaction, such as through book clubs or workshops. We include some reading materials, music, and a workshop or course. Many of these resources are also available for free through the public library. In addition,

we include supplies for gardening, one of the common leisure activities noted in our focus groups, although this could be substituted for another activity.

- Books
- Magazine/newspaper
- Music
- Gardening supplies
- Workshop or course

Outings and Socializing

Social activities are particularly important for older adults, as they protect against social isolation and loneliness and are strongly associated with health and well-being.[38-39] Our focus group participants felt that socializing was very important to their sense of well-being. In particular, for those who had experienced the death of a spouse or friends, joining clubs and associations offered an opportunity to meet new people. Focus group participants also mentioned that they enjoy going to sporting events, movies, and other attractions with family and friends.

Going out to eat was another preferred social activity in focus groups. Recognizing that eating out is often less nutritious than eating at home, we have chosen to limit these outings to once per week, below the Ontario average of twice per week.[39] We also include some additional items for hosting friends or family for meals at home, although most food is captured in the *Food & Nutrition* component. Civic contributions are also included to account for memberships fees associated with joining a club or association. Celebrating special occasions is an important social and cultural activity, so gift-giving is also included in this component.

- Cultural outings (tickets to movie, gallery/museum, concert, or sporting event)
- Special occasions (additional food/drink for entertaining at home)
- Gifts (birthdays, holidays, etc.)
- Restaurant outings
- Civic contributions (membership fee to club or association)

Donations

Maintaining social capital through involvement in ones' community is an important facet of well-being in later life.[40] Many older Canadians volunteer their time to causes and organizations in their communities, and generally give more of their time than their younger counterparts.[41] Charitable donations are also an important means of contributing to community, and peoples' donations tend to increase with age.[42] In addition, those between 65-74 are more than twice as likely to participate in regular religious services compared to younger adults.[44] This participation often comes with expectations of giving, whether in

terms of financial contributions to a place of worship or in-kind contributions such as food or equipment. To this end, we include charitable donations as part of the social participation component.

- Charitable donations

Telecom Services

Access to internet and phone services is necessary for keeping in touch with friends and family as well as managing day-to-day tasks like banking or scheduling appointments. The majority of Canadian adults now own a smartphone,[43] and focus group participants agreed that a landline was not necessary. Focus group participants also noted that cable TV was an important way to get news and watch television shows and movies.

- Basic home internet
- Basic cable
- Basic smartphone plan

Travel

In focus groups, travelling was identified as an important social activity for older adults. Travelling is associated with an improved sense of well-being and perceived health.[44] For some, visiting new places was an opportunity to relax, learn, and socialize with others. For many, the purpose of travelling was to spend time with friends and family, including children and grandchildren. Most focus group participants spoke about travelling within Canada. However, international travel is also important in the context of the GTA: 68% of adults over age 65 were born outside of Canada,[45] indicating that they may need to travel abroad in order to stay connected with family and friends. Focus group participants noted that, in addition to items associated with travel itself, they also needed access to travel health insurance. Many focus group participants noted that they value the opportunity to travel in retirement, but worry about experiencing a medical emergency while abroad. This component includes train or air travel within Canada as well as an international trip. Accommodation is included only for one trip, as we assume that people will stay with family and friends otherwise.

- Domestic travel
- International travel (no accommodation)
- Travel health insurance

Contingencies

Savings and debt were prominent components of the first iteration of the *Thriving in the City* framework for younger adults. However, this component is not included in the framework for older adults. Our assumption is that retired older adults have repaid any outstanding debts

and have built sufficient savings or investments to manage living expenses. Additionally, retired older adults will not have the opportunity to save substantially, as they will have withdrawn from the workforce. Therefore, it would not be realistic to include a substantial savings component.

While this framework accounts for everyday expenses, we recognize that unexpected events may occur that have not been accounted for. In lieu of regular contributions to long-term savings, a small contingency has been included to account for unexpected expenses and emergencies. Following the framework from Morris et. al. (2007), this contingency will be approximately 6% of total living expenses.

Discussion and Implications

The framework presented here demonstrates that older adults need more than the basics in order to thrive as they age. It recognizes the importance of connecting with family and friends, continuing to learn new skills, contributing to ones' community, and preparing for more extensive health care needs throughout the aging process. These activities are not luxuries; evidence consistently demonstrates that they are necessary for achieving good health and well-being in older age. While individuals may have distinct preferences for specific activities or items, each dimension of health is reflected.

Canada's retirement income system has been viewed largely as successful, with evidence showing a relatively low rate of poverty among older adults.[46] However, in Ontario and across Canada, the rate of poverty among older adults has increased and fewer adults are financially prepared for retirement.[47, 48] While voluntary private savings are an important feature of Canada's retirement income system, many low-income older adults cannot save the resources required for retirement through their own contributions. [49] In Toronto, there is already evidence of income-related health disparities between high- and low-income older adults[50] For example, those with higher incomes are more likely to report being in good general health and are more likely to engage in important preventive behaviours such as flu shots. Those with lower incomes are also disproportionately female and racialized, suggesting that they may face marginalization that affects their health throughout their lives. If the rate of poverty among older adults continues to rise, it is likely that low-income individuals will face greater health risks as a result.

These challenges highlight the importance of understanding Canada's retirement income system through a lens of health and well-being. In policy discussions, the replacement rate is often used as a metric to assess income adequacy for older adults. However, this metric does not capture the health needs noted in this framework. For example, an assessment strictly based on replacement rates would find that low-income older adults would replace approximately 80% of their pre-retirement income through OAS, GIS, and CPP.[48] This figure would lead to a conclusion that "most low-income seniors have adequate income

security, with annual retirement incomes equal to or more than income earned during their working lives."[51] However, this straightforward metric does not take into account the resources required to maintain a healthy life for older Canadians. There is a need for a critical examination and discussion about whether low-income Canadians are truly able to thrive, both pre- and post-retirement.

This framework also illustrates how the concept of "thriving", although grounded in evidence, is dynamic and context-specific. Many of the needs described in the framework reflect the changing social and economic reality of the GTA. For example, the relatively low rate of home ownership within the City of Toronto, likely a function of unaffordable housing prices, means that many older adults turn to renting as a more affordable alternative. The need for annual travel to visit family and grandchildren speaks to the role of immigration and diaspora in the GTA; many older adults have moved to the GTA from elsewhere, and many have family connections across Canada and around the world. These social and economic trends will also come to bear as the current working-age population moves towards retirement. For example, there may be even lower rates of homeownership in the next cohort of older adults, and there will likely be even fewer individuals who can rely on employer-sponsored pensions.

The *Thriving in the City* framework for older adults offers an opportunity to understand what healthy aging looks like in the GTA. If the goal of the retirement income system is to help Canadians maintain an adequate level of income to thrive in their retirement, we need a different approach to the retirement income system and other policies. This framework can be a starting point for understanding how the policies that affect older adults can better reflect a vision of health and health equity.

References

1 Kumar, N., McKenzie K, & Um, S. (2017). Thriving in the City: A Framework for Income and Health. Wellesley Institute. Retrieved from: http://www.wellesleyinstitute.com/publications/thriving-in-the-city-a-framework-for-income-and-health/

2 Kumar, N., McKenzie K, & Um, S. (2017). Thriving in the City: A Framework for Income and Health. Wellesley Institute. Retrieved from: http://www.wellesleyinstitute.com/publications/thriving-in-the-city-a-framework-for-income-and-health/

3 Canadian Institute for Health Information (2011). Health Care In Canada: A Focus on Seniors and Aging. Retrieved from: https://secure.cihi.ca/free_products/HCIC_2011_seniors_report_en.pdf

4 Gilmour, H. (2012). Social participation and the health and well-being of Canadian seniors. Health Reports, 23(4). Statistics Canada. Retrieved from http://www.statcan.gc.ca/pub/82-003-x/2012004/article/11720-eng.pd

5 Department of Finance Canada (2010). Ensuring the Ongoing Strength of Canada's Retirement System. Government of Canada. Retrieved from: http://www.fin.gc.ca/activty/consult/retirement-eng.asp

6 Meredith, T (2015). Lower Risk, Higher Reward: Renewing Canada's Retirement Income System. Mowat Centre. Retrieved from: https://mowatcentre.ca/lower-risk-higher-reward-canadas-retirement-income-system/

7 Department of Finance Canada (2016). Backgrounder: Canada Pension Plan (CPP) Enhancement. Government of Canada. Retrieved from: http://www.fin.gc.ca/n16/data/16-113_3-eng.asp

8 Statistics Canada. (2017). Household income in Canada: Key results from the 2016 Census. Retrieved from https://www.statcan.gc.ca/daily-quotidien/170913/dq170913a-eng.pdf

9 The Canadian Medical Association. (2013). Health and Heath Care for an Aging Population. Retrieved from https://www.cma.ca/Assets/assets-library/document/en/advocacy/policy-research/CMA_Policy_Health_and_Health_Care_for_an_Aging-Population_PD14-03-e.pdf

10 Canadian Institute of Health Information. (2011). Health Care in Canada, 2011. A Focus on Seniors and Aging. Retrieved from https://secure.cihi.ca/free_products/HCIC_2011_seniors_report_en.pdf

11 Morris, J. N., & Deeming, C. (2004). Minimum incomes for healthy living (MIHL): next thrust in UK social policy? Policy & Politics, 32(4), 441–454.

12 Morris, J. N., Simpson, R., Hollingsworth, D., Wilkinson, P., & Dowler, E. A. (2000). A minimum income for healthy living. Journal of Epidemiology& Community Health, 54, 885–889.

13 Morris, J., Wilkinson, P., Dangour, A. D., Deeming, C., & Fletcher, A. (2007). Defining a minimum income for healthy living (MIHL): older age, England. International Journal of Epidemiology, 36(6), 1300–1307.

14 O'Sullivan, J., & Ashton, T. (2012). A minimum income for healthy living (MIHL) – older New Zealanders. Ageing and Society, 32(5), 747–768.

15 Kumar, N., McKenzie K, & Um, S. (2017). Thriving in the City: What does it cost to live a healthy life? Retrieved from http://www.wellesleyinstitute.com/wp-content/uploads/2017/09/Thriving-in-the-City-What-does-it-cost-1.pdf

16 Ahmed, T., & Haboubi, N. (2010). Assessment and management of nutrition in older people and its importance to health. Clinical Interventions in Aging, 5, 207–216.

17 World Health Organization (n.d.). Nutrition for Older Persons. Nutrition Topics. Retrieved from: http://www.who.int/nutrition/topics/olderpersons/en/

18 Health Canada, Health Products Food Branch, Office of Nutrition Policy & Promotion. (2012). Background on Canada's Food Guide. Retrieved from: http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/context/index-eng.php

19 Health Canada, Health Products & Food Branch. (2009). National Nutritious Food Basket. Retrieved from: http://www.hc-sc.gc.ca/fn-an/surveill/basket-panier/index-eng.php

20 Katamay, S., Esslinger, K., Vigneault, M., et. al. (2007). Eating Well with Canada's Food Guide: Development of the Food Intake Pattern. Office of Nutrition Policy and Promotion, Health Products and Food Branch, Health Canada. https://www.canada.ca/en/health-canada/services/food-nutrition/reports-publications/eating-well-canada-food-guide-2007-development-food-intake-pattern.html

21 Moloughney, B. (2004). Housing and Population Health: The State of Current Research Knowledge. Canadian Institute for Health Information & Canada Mortgage and Housing Corporation. Retrieved from: https://secure.cihi.ca/free_products/HousingPopHealth_e.pdf

22 Canada Mortgage and Housing Corporation. (n.d.). "Housing Standards" - Housing in Canada Online Definitions. Retrieved from: http://cmhc.beyond2020.com/HiCODefinitions_EN.html#_Housing_Standards

23 Dunn, J., Creatore, M., Peterson, E., Weyman, J., & Glazier, R. (2009). Peel Healthy Development Index - Final Report. Centre for Research on Inner City Health, St. Michael's Hospital, Toronto. Retrieved from http://www.peelregion.ca/health/urban/pdf/HDI-report.pdf

24 Canada Mortgage and Housing Corporation. (2011). [Household count for non-family households, ages 65+, by tenure type and regional municipality.] Housing in Canada Online. Retrieved from: http://cmhc.beyond2020.com/TableViewer/tableView.aspx

25 Statistics Canada. (2016). Age of Primary Household Maintainer (15), Tenure (4), Structural Type of Dwelling (10), Condominium Status (3) and Household Type Including Census Family Structure (16) for Private Households of Canada, Provinces and Territories, Census Metropolitan Areas and Census Agglomerations, 2016 Census - 25% Sample Data. Retrieved from http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/dt-td/Rp-

26 Sengupta, R. P., Fordham, J., Day, N., Macfarlane, R., & Campbell, M. (2013). Next Stop Health: Transit Access and Health Inequities in Toronto. Toronto Public Health. Retrieved from http://www.toronto.ca/legdocs/mmis/2013/hl/bgrd/backgroundfile-56681.pdf

27 Hertel, S., Keil, R., & Collens, M. (2015). Switching Tracks: Towards transit equity in the Greater Toronto and Hamilton Area. City Institute, York University, Toronto. Retrieved May 8, 2017 from http://suburbs.apps01.yorku.ca/wp-content/uploads/2015/03/Switching-Tracks_9-March-2015.pdf

28 Statistics Canada. (2009). Main form of transportation, by age and sex, 2009. Retrieved from http://www.statcan.gc.ca/pub/11-008-x/2012001/t/11619/tbl03-eng.htm

29 Heikkinen, R. (1998). The Role of Physical Activity in Healthy Ageing. Ageing and Health Programme, World Health Organization. Retrieved from: http://apps.who.int/iris/bitstream/10665/65231/1/WHO_HPR_AHE_98.2.pdf

30 Tremblay, M. S., Warburton, D. E. R., Janssen, I., Paterson, D. H., Latimer, A. E., Rhodes, R. E., … Duggan, M. (2011). New Canadian physical activity guidelines. Applied Physiology, Nutrition & Metabolism, 36, 36–46.

31 Statistics Canada. (2005). [Percentage participating in selected leisure-time activities and average number of times per month, household population aged 12 or older]. Canadian Community Health Survey. Retrieved May 1, 2017, from http://www.statcan.gc.ca/pub/82-003-x/2006008/article/phys/t/4060708-eng.htm

32 The Canadian Association of Optometrists. (n.d.). Frequency of Eye Examinations. Retrieved from https://opto.ca/health-library/frequency-of-eye-examinations

33 Canadian Dental Association. (n.d.). Dental Care. Retrieved from https://www.cda-adc.ca/en/oral_health/faqs/dental_care_faqs.asp

34 The Canadian Medical Association. (2013). Health and Heath Care for an Aging Population. Retrieved from https://www.cma.ca/Assets/assets-library/document/en/advocacy/policy-research/CMA_Policy_Health_and_Health_Care_for_an_Aging-Population_PD14-03-e.pdf

35 Donner et al. (2015). Bringing Care Home. Retrieved from http://health.gov.on.ca/en/public/ programs/ccac/docs/hcc_report.pdf

36 Gilmour, H. (2012). Social Participation and the Health and Well-Being of Canadian Seniors. Statistics Canada. Health Reports 23(4). Retrieved June 11 2017 from http://www.statcan.gc.ca/pub/82-003-x/2012004/article/11720-eng.htm.

37 Betts Adams K., Leibrandt S., Moon H. (2011). A critical review of the literature on social and leisure activity and well-being in later life. Ageing and Society 31, 683-712.

38 Yates, L. A., Ziser, S., Spector, A., & Orrell, M. (2016). Cognitive leisure activities and future risk of cognitive impairment and dementia: systematic review and meta-analysis. International Psychogeriatrics, 28(11), 1791–1806.

39 Canadian Restaurant and Food Service Association. Canada's Restaurant Industry: putting jobs and economic growth on the menu. (2010). Retrieved from: http://www.restaurantscanada.org/wp-content/uploads/2016/07/Report_IpsosPublicOpinion_Dec2010.pdf

40 Veninga, J. (2006). Social Capital and Healthy Aging. Health Canada. Health Policy Research (12) 21-25. Retrieved from: https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/sr-sr/alt_formats/hpb-dgps/pdf/pubs/hpr-rps/bull/2006-capital-social-capital/2006-capital-social-capital-eng.pdf

41 Vezina, M. & Crompton, S. (2012). Volunteering in Canada. Statistics Canada. Canadian Social Trends 11-008. Retrieved June 11 2017 from http://www.statcan.gc.ca/pub/11-008-x/2012001/article/11638-eng.pdf.

42 Turcotte, M. (2012. Charitable Giving by Canadians. Statistics Canada. Canadian Social Trends 11-008. Retrieved June 11 2017 from http://www.statcan.gc.ca/pub/11-008-x/2012001/article/11637-eng.htm#a7.

43 Canadian Radio-Television and Telecommunications Commission. (2016). Communications Monitoring Report. Retrieved from http://www.crtc.gc.ca/eng/publications/reports/PolicyMonitoring/2016/cmr.pdf

44 Chen, C., & Petrick, J. F. (2013). Health and wellness benefits of travel experiences: a literature review. Journal of Travel Research, 52(6), 209–719.

45 Um, S. & Lightman, N. (2017). Health in the GTA: How Immigration, Language, and Racialization Impact Seniors' Health. Wellesley Institute. Retrieved from: http://www.wellesleyinstitute.com/wp-content/uploads/2017/05/Seniors-Health-in-the-GTA-Final.pdf

46 Meredith, T (2015). Lower Risk, Higher Reward: Renewing Canada's Retirement Income System. Mowat Centre. Retrieved from: https://mowatcentre.ca/lower-risk-higher-reward-canadas-retirement-income-system/

47 Meredith, T (2015). Lower Risk, Higher Reward: Renewing Canada's Retirement Income System. Mowat Centre. Retrieved from: https://mowatcentre.ca/lower-risk-higher-reward-canadas-retirement-income-system/

48 Department of Finance Canada (2016). Backgrounder: Canada Pension Plan (CPP) Enhancement. Government of Canada. Retrieved from: http://www.fin.gc.ca/n16/data/16-113_3-eng.asp

49 Pegg, S. (2010). Fairness for Canadian Seniors: A Reality Check on Pensions. Food Banks Canada. Retrieved from: https://www.foodbankscanada.ca/getmedia/3f4cabee-025a-4430-8f2a-5f4f8a64f815/Food-Banks-Canada---Fairness-for-Canadian-Seniors_Aug-2010.pdf.aspx?ext=.pdf

50 Toronto Public Health Surveillance and Epidemiology Unit (2017). Healthy Aging in Toronto. Toronto Public Health. Retrieved from: https://www1.toronto.ca/wps/portal/contentonly?vgnextoid=09c8850ff308a510VgnVCM10000071d60f89RCRD

51 Mintz, J. (2009). Summary Report on Retirement Income Adequacy Research. Department of Finance Canada. Retrieved from: http://www.fin.gc.ca/activty/pubs/pension/riar-narr-eng.asp

Supportive Housing in Ontario: Estimating the Need

By Greg Suttor

Wellesley Institute
advancing urban health

January, 2017

Wellesley Institute works in research and policy to improve health and health equity in the Greater Toronto Area through action on the social determinants of health.

Copies of this report can be downloaded from www.wellesleyinstitute.com.
Supportive Housing in Ontario: Estimating the Need | Report

10 Alcorn Ave, Suite 300
Toronto, ON, Canada M4V 3B2
416.972.1010
contact@wellesleyinstitute.com

Wellesley Institute
advancing urban health

Introduction

This report provides preliminary population-based estimates of need for housing with support for people with serious mental illness or addiction in Ontario.

Various approaches can be taken to estimating need for supportive housing. These include use of administrative or clinical data such as waiting lists, consultations with service provider agencies or experts, application or projection of relevant data from broader populations, and social or population surveys.

Population-based estimates are a useful systematic approach to understanding needs. Population-based estimates should be viewed as one approach among others, serving as a form of triangulating and cross-checking of estimates produced by other approaches.

There exist no population-based estimates of need for this type of supportive housing in Ontario. Indeed, a review of the large research literature on supportive housing for people with mental illness or addictions found no general population-based estimates for any jurisdiction, with two notable exceptions. One of these was Waegermakers-Schiff et al. (2014).[1] This source briefly reviewed the range and dominant themes in the mental health housing literature, identified this large gap, and prepared an estimate for Calgary. Another exception was Patterson et al. (2007),[2] discussed below.

As prior research has noted,[3] there are also no standard methodologies for analyses population-based need estimates for housing with support in relation to mental illness (mental disorder) and addictions (problematic substance use). However, there are standard methods for key methodological steps or components – which can be combined into an overall method as discussed below.

Factors Determining Need for Housing with Support

Conceptual Approach

Patterson et al. (2007) provide a basis for a methodology for population-based estimates of need for supportive housing. The following are their components (stages) of estimation:

- Adapting measures of the prevalence of mental disorder, and specifically severe mental disorder;
- Estimating the percentage that are inadequately housed;
- Estimating the percentage that require housing-related support.

The foregoing approach is adapted in the present report, by breaking out components of analysis that are standard in more general housing need studies: the household formation rate (headship rate), and an analysis of households by income level (quintile). The rationale for this is set out in the sections of this report that deal with these components.

There are also interaction effects between some of these factors: for example, between mental illness

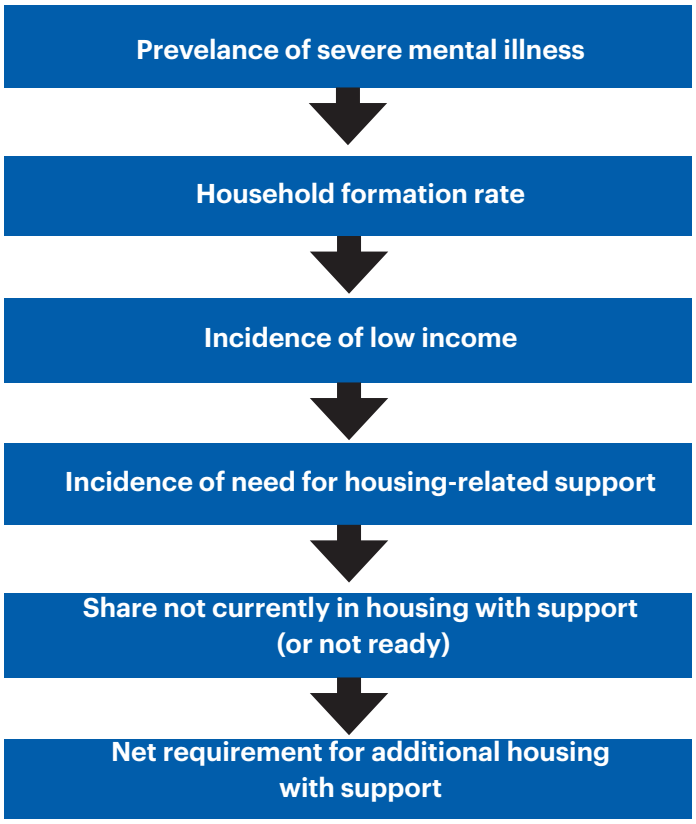
1 Jeanette Waegemakers Schiff, Rebecca Schiff, and Barbara Schneider (2014), "Developing an Estimate of Supported Housing Needs for Persons with Serious Mental Illnesses" *International Journal of Population Research,* Volume 2014 (online, DOI 10.1155/2014/245024).

2 Michelle Patterson, Julian Somers, Karen McIntosh, and Alan Shiel (2007), *Housing and Support for Adults with Severe Addictions and/or Mental Illness in British Columbia* (Burnaby BC: Centre for Applied Research in Mental Health & Addiction, Simon Fraser University. Prepared for the BC Ministry of Health).

3 Waegemakers Schiff et al., p. 2.

and household formation; mental illness and low income; household formation and need for support. These interactions are considered in the discussion that follows.

This series of cascading probabilities is considered in the next five subsections, dealing in turn with prevalence of serious mental illness, household formation rates, income levels, need for housing-related support, and netting out households already in supportive housing. An estimate on this basis is then provided.



Prevalence of Severe Mental Illness

Several studies based on population surveys have established the incidence of mental illness and addictions (mental disorders including problematic substance use).[4] Tables 1 to 3 provide data on this. Of particular interest are studies which break out "serious" or "severe" mental illness or addictions.[5]

Lifetime prevalence is little relevant for the present purpose. For example, if a person has serious

4 See Kessler, Ronald C., Wai Tat Chiu, Olga Demler, and Ellen E. Walters (2005), "Prevalence, Severity, and Comorbidity of 12-Month DSM-IV Disorders in the National Comorbidity Survey Replication," *Archives of General Psychiatry 62* (6): 617-627; Offord, David R., Michael H. Boyle, Dugal Campbell, Paula Goering, Elizabeth Lin, Maria Wong, and Yvonne A Racine (1996), "One-Year Prevalence of Psychiatric Disorder in Ontarians 15 to 64 Years of Age" *Canadian Journal of Psychiatry 41*: 559-563; Rush, Brian, Karen Urbanoski, Diego Bassani, Saulo Castel, T. Cameron Wild, Carol Strike, Dennis Kimberley, and Julian Somers (2008), "Prevalence of Co-occurring Substance Use and Other Mental Disorders in the Canadian Population," *Canadian Journal of Psychiatry 53* (12): 800–809.

5 Canadian Community Health Survey online data, Rush et al. (2008) based on the CCHS, the CMHC 2010 report on the Participation and Activity Limitation Survey are all of relevant interest but do not identify a prevalence of severe cases.

depression or serious drug/alcohol use at some point in their lifetime, this does not *ipso facto* mean that they need housing with supports at the present time. Total lifetime prevalence produces a greatly exaggerated picture of the size of the population with impaired functioning and activity at any given time. Therefore the focus is initially on 12-month prevalence, subject to further comments below.

Table 1
Prevalence of Serious Mental Illness and Addictions tin Ontario and Elsewhere

12-month prevalence – adults

Authors	Survey Source	Population	Overall Prevalence	Prevalence of Severe
CANSIM	CCHS 2012	Canada	10.1	n/a
Patterson et al. (2007)	Various	BC, Adults	28.7	6.3
Kessler et al. (2005)	Co-morbidity survey	USA, English-speaking	26.2	5.8
Bijl et al (2003)	WHO	Canada	19.9	3.9
Bijl et al (2003)	WHO	US, Netherlands, Germany	22.8-29.1	5.4 - 8.2
CMHC (2010)	PALS	Canada	15.4	n/a
OHRC	Disability survey	Canada	4.8	3.5

Sources: see references; see also selected details in tables A1 to A4.

Percent of population 15+ or 18+. See text and Appendix 3 regarding definitions of severity.

- Kessler et al. (2005), from the National Comorbidity Survey Replication (NCS-R) carried out in 2001-2003, covering USA English-speaking population age 18 plus, provide data for "serious," "moderate" and "mild" disorders.
- Bijl et al. (2003) reported estimates of severe mental disorders in four countries, mostly affluent Western ones and including Canada, based on population survey data.
- Patterson et al. (2007), a study conducted for the BC government, provided estimates of mental illness and addictions and of severity. Their prevalence rates for particular disorders draw on several studies that were not separately reviewed for this report.
- The Ontario Human Rights Commission (2015) used data primarily from the 2012 Canadian Survey on Disability, on "mental/psychological disability" (without breakdown by type), and with severity.

These sources use varying definitions of severe, detailed in Appendix 3. Most gave weight to impacts on role and activity in daily life, either as reported by respondents or as previously known from mental health research and clinical practice. Appendix 2 also notes some systematic surveys of prevalence that break out serious or severe mental illness.[6] These data point to a 12-month prevalence of serious or severe mental

6 Of particular interest are the series of systematic literature reviews by Somers, Wairach, Goldner and Hsu published in 2002 to 2006, synthesizing international survey and clinical estimates on prevalence of schizophrenic, anxiety, mood, and substance abuse disorders internationally (see Table A5 in this report, and references); and for a society very similar to English-speaking Canada, Henderson et al. (2000) "Australia's mental health: overview of the general population survey."

illness and addictions of 3 to 6 percent of adult population, with notable differences among the sources.

The high end of the 3 to 6 percent range, with 1 in 20 people or more having serious mental illness or addiction, clearly applies a broad definition of "serious." The 12-month prevalence data are likely to capture many people whose issues will not impair functioning and activity in an enduring way. For example, there will be people who have serious depression or serious drug/alcohol use for a year or two in their life, but (perhaps with supports) – are able to move on from that experience. It is people whose functioning, social roles, and activities of daily life are impaired in an enduring way that are the population potentially needing housing with supports. Some measure of chronicity is needed, as well as more refined or graduated measures of functional impairment, but these were not available in the sources reviewed for this report.

Other sources state a prevalence of serious mental illness ranging between 2 and 5 percent. The MHCC *Turning the Key* cites 2 to 5 percent (see table 8 below) without discussion. The Ontario provincial Auditor's 2008 review of Community Mental Health programs[7] refers to an estimated 2.5 percent of Ontario population, age 16 and higher, having "serious mental illness." Ontario's 1988 Graham report, *Building Community Support for People*, used a much narrower definition, equating to 0.4 percent of population.[8]

Table 2

Estimated Population with Severe Mental Illness and Addictions in Ontario and Greater Toronto

	Population Age 15+	Severe Mental Illness or Addiction (at alternative 12-month prevalence rates)		
		If 2% prevalence	If 3% prevalence	If 4% prevalence
Ontario (2011)	11,058,000	220,000	330,000	440,000
Ontario (2015)	11,601,000	230,000	350,000	460,000
Greater Toronto (2011)	4,995,000	100,000	150,000	200,000
Greater Toronto (2016)	5,642,000	110,000	170,000	220,000

Source: Prevalence rates (see prior sections of report) applied to population age 15 and over, census/NHS 2011 and official population estimates for 2015-2016.

Accordingly, this report uses a 12-month prevalence range of 2 to 4 percent of population having severe mental illness or addictions. This yields the Ontario and Greater Toronto counts in Table 2. These are not measures of the need for housing with supports, but rather are a starting point for the cascading probabilities discussed in the following subsections.

7 Ontario, Auditor General, 2008 report, section 3.06, "Community Mental Health," p. 172. The report does not estimate the share of the population with serious mental illness that requires housing with support

8 Ontario, Provincial Community Mental Health Committee (1988), *Building Community Support for People*, p. 3: "38,000 are severely disabled by schizophrenia, affective disorders, and other mental illnesses." Ontario's 1986 population was 9.1 million as compared to 13.8 million in 2016.

Household Formation (Headship) Rates

People with mental health and addiction disabilities or chronic conditions are more likely to live alone. This means a higher number of dwellings per person are needed in this sub-population than in the population overall.

The relevant statistics are the household formation rate (headship rate), and in particular the propensity to live alone in a one-person household. The household formation rate is the ratio of households to population, and is a measure of the probability that an individual will form a household.[9] To illustrate at the individual level: a couple without children has a rate of 0.5 (1 household per 2 persons), while a couple with one late-adolescent child living at home has a rate of 0.33 (1 household per 3 persons). Household formation (headship) rates for the general population are readily available. For example, for Greater Toronto the census-based household formation rates in 2011 were 50.6% for population age 25 up.[10]

There is an interaction effect between the household formation rate and the incidence of low income (see next subsection). Low income tends to lower household formation because people are less able to pay for a place of their own, even if rented. But social and health policy should not use a logic whereby need is lower as a direct function of economic disadvantage; therefore low income is considered below in regard to need for assistance but is not considered here as a distinct factor in household formation. If people rely on their family or live in an institutional or group setting because of their disability, this reduces household formation. If people rent rooms, this will not show up as a 'household' in census data, even though they are living on their own. If fewer people form or maintain conjugal or other family relationships then household formation will be higher. Empirically, this last factor appears to dominate.

OHRC's *By the Numbers* report found that 22 percent of Ontario residents (age 15 up) with a mental health disability live alone (in a one-person household) – almost double the 12 percent share of the total population that lives alone.[11] This equates to a much large share of households, because the remaining population has less than one household per person.

Table 3 shows that the household type of people with mental health disabilities (age 15 up) is far more likely to be a single-person household (at 41 versus 27 percent of households) and far less likely to be a family with children (13 versus 29 percent).[12] This is calculated from census data and the CMHC analysis of the 2001 *Participation and Activity Limitation Survey.*[13] There is little difference in other household types. The net result is a moderately higher household formation rate, calculated on table 3 as 63 versus 53 percent. This is essentially measuring much the same difference as the 22 vs. 12 percent above: an

9 For a general discussion of headship rates see Michael J. Murphy (1991), "Modelling Households: A Synthesis" *Population Studies 45* (supp.): 157-176. For a recent application to Canada, see Canada Mortgage and Housing Corporation (2013), *Long-Term Household Growth Projections – 2013 Update* (Ottawa: CMHC).

10 Calculated from census and NHS data. Rates for all ages including 15-25 were lower at 43.4 percent. Rates for age 65 up were higher at 56.4% (applies to 65-74 and to age 75 up).

11 Ontario Human Rights Commission (2015), *By the Numbers: A Statistical Profile of People with Mental Health and Addiction Disabilities in Ontario* (Toronto: OHRC) cites data for categories of disability which equate to a total 11.8 percent of Ontario population living alone. This is consistent with 11.7 percent in the2011 census (cat. 98-312-XCB2011030).

12 The percentage in Core Need were little different between the two groups, for other types of households, i.e. non-family shared households, single parents, and couple without children.

13 Canada Mortgage and Housing Corporation (2010), *2001 Participation and Activity Limitation Survey: Issue 4—Profile of the Housing Conditions of Canadians Aged 15 Years and Older with an Emotional/Psychological Disability* (Research Highlight).

Table 3

Household Formation Rates: Estimated Variation by Mental Health

	Estimated Average Household Size	Resulting Household Formation Rate	Distribution by Household Type	
			Persons with "Emotional / Psychological Disability"	All Persons
Living alone	1.00	1.00	41.3%	27.2%
Living with other (non-family)	2.50	0.40	8.3%	7.1%
Lone parent family	2.80	0.36	24.1%	21.4%
Couple without children	2.00	0.50	12.9%	14.8%
Two-parent family	3.80	0.26	13.4%	29.4%
			100%	100%
Overall household formation rate			**63%**	**53%**

Distribution by household type from CMHC (2010), PALS Issue 4—Profile of the Housing Conditions of Canadians Aged 15 Years and Older with an Emotional/Psychological Disability.

Estimated household size calculated here from number of children by household type, Statistics Canada, 2011 census, cat 98-312-XCB (except non-family, 2.5 assumed here).

Overall household formation rate calculated here = ∑ (percent share x Household formation rate for each row)

extra 1 in 10 people with a mental health disability live alone, compared to the general population.

It appears probable that these higher household formation rates are more pronounced for people with more *severe* mental health or addictions issues, but specific data are lacking.

For purposes of the general estimates below, a household formation rate of 60 to 70 percent will be used, i.e. a range close to but skewing upward from the 63 percent cited above.

Prevalence of Low Income

The subset of households that has mental illness or addiction and *low income* may require housing with support. The subset that has lower-middle to upper income can obtain market housing. While a person in the latter group may require housing *support*, he or she does not need a program to provide *housing*.

Low personal income does not directly imply low household income, but it raises the probability. For example, many people with personal income under $20,000 live in a household with two or more earners/

beneficiaries and a resulting combined income above $30,000. At that level the household can afford market rents. Only those with low *household* income require housing assistance.[14]

People with mental health disabilities tend to have lower incomes than others. This reflects the reality that it is more difficult to maintain stable employment, especially high-skilled employment. Two main sources document the relative incomes for Ontario and Canada. Prevalence data from the Canadian Community Health Survey show that one-third[15] of Canadians with selected mental and behavioural disorders are in the first quintile of *personal* income (Table 4).

OHRC's *By the Numbers* report, drawing on the 2012 Canadian Survey on Disability, shows that in Ontario the average personal income and the household income for people with mental health problems are only about 60 percent of the level for those without disabilities. It shows that the incidence of low personal income among people with mental health problems is 20 percent, which is twice the incidence for those without a disability. The incidence of Core Housing Need, an indicator highly correlated with low income, is almost 30 percent, again twice the general rate.[16]

The income differences reported by these two sources are broadly consistent. It is unclear from the two in combination whether the tilt to low *household* income is stronger than that to low *personal* income of not. Differences from the general population will probably be larger for people with a *severe* mental illness or addiction, but specific data are not available.

Table 4

Prevalence of Selected Chronic Conditions by Income Quintile

Canadian Community Health Survey: Indicative Data

	Income quintile (personal income)					Average	Ratio: Lowest quintile value to average	Implied Share in First Quintile
	1st (lowest)	2nd	3rd	4th	5th (highest)			
	Rates per 1,000 population							
Mental & behavioural disorders*	146	90	81	77	64	92	1.6	32%
Anxiety (subcategory)	81	44	42	39	35	48	1.7	34%
Mood disorders (subcategory)	105	64	55	54	39	63	1.7	33%

Source: Canadian Community Health Survey, background data for *Poverty is Making us Sick* (2008)[1]

*Includes include anxiety disorders, mood disorders, Alzheimer's or dementia and schizophrenia.

Share in first quintile is computed arithmetically from the prevalence within equal populations in each quintile.

14 The probability that a person with low personal income is in a low-income household could be calculated from census microdata, but this has not been done for this report.

15 CCHS data used in Lightman et al. *Poverty is Making Us Sick* (background data tables) show prevalence for those in the first quintile of personal income, of 14.6% for any mental or behavioural disorder; 8.1% for anxiety disorder, and 10.5% for mood disorder. This equates mathematically to respectively 32%, 34%, and 33% of those with such conditions being in the first quintile.

16 OHRC p. 43: personal income $18,610 for those with a "mental/psychological disability" vs. $30,578 for those with no disability; household income $51,267 vs. $82,631; p. 29, Core Need 29 vs. 14 percent; p. 46, percent below LICO 19.6 percent vs. 10.4 percent.

These income effects will not be fully offset by rent subsidies if available. An RGI benefit of typically about $7,000 annually, accessible via a long waiting list, does not fundamentally alter the inequality of income or the resulting constrained housing options and reduced ability to afford to run a household.

A reasonable conclusion based on the available data is that about one-third of persons with mental illness or addiction have low *household income*, compared to about one-fifth of all households.

For purpose of the general estimates in section 3, an incidence of low household income of 30 to 40 percent is used, i.e. a range close to but skewing upward from the 33 percent cited above.

Incidence of Need for Housing-related Support

Among people with serious mental illness, the share requiring funded supports to maintain stable housing is high but not universal. Waegemakers Schiff et al. (2014)[17] note that not all require housing-related support. Many people live with chronic depression in a house they own or live with stable tenancies, despite histories of diagnosed schizophrenia. Some people may rely on the support of others in their household.

As noted, the relationship of prevalence to a need for housing with support is not direct. Of all the parameters discussed in section 2 of this report, this one is the least well quantified in existing research. Some key points in this regard:

- Not everyone with a severe or serious mental illness needs housing-related support, even if they are living on their own. For example, substance use disorders, major depressive episodes, and suicidal thoughts are not uncommon in many people's lifetimes and even in a given year, but in many cases this does not mean a need for housing with supports.
- On the other hand, it is not only severe diagnoses such as schizophrenia or psychosis that mean a person needs housing with support. These conditions perhaps most often lead to difficulty keeping regular employment, inadequate income, social isolation, and functional disabilities in maintaining stable housing. But major depression as well as severe drug/alcohol dependency and various other mental illnesses may have the same result.[18]

Durbin et al. (2005, p. 7)[19] reported data on need for support among about 4,300 clients/residents in community mental health housing programs, as part of a broader 1998-2001 assessment of needs in Ontario's community mental health programs and psychiatric hospitals. "Among those receiving service from provincial psychiatric hospitals, 72% of inpatients and 47% of outpatients were assessed as needing housing support. Of those using community mental health services, 35% overall were rated as needing housing support, including 70% of those using ACT, 44% of those using case management and 47% of those using social/recreational programs." Patterson et al. (2007, p. 33), examining needs in BC in consultation with an expert advisory group, concluded on this basis "that approximately 70% of adults with SAMI [serious addictions or mental illness] who are inadequately housed are also inadequately supported."

There is an expected interaction effect between low income and aspects of household formation (especially being in a single-person household), and the need for support. A person with low income who lives alone

17 Waegemakers Schiff, Schiff, and Schneider (2014).

18 ibid., p. 2.

19 Janet Durbin, Lindsey George, Christopher Koegl, and Caitlin Aitchison-Drake (2005), *Review of Ontario Mental Health Supportive Housing System and Potential Data Sources for System Monitoring* (for the Ontario Ministry of Health and Long Term Care).

may be less able to draw on informal family support, or to use his or her better resources to access various types of non-housing-related support.

There is also an expected interaction effect between use of a high versus low prevalence estimate of severe mental illness and the need for support. A higher prevalence estimate will tend to capture more people who have a lesser need for support, thereby lowering the overall incidence of need for housing-related support.

The sources above point to a range of between 50 to 70 percent of persons with serious mental illness needing housing support. This range is used below in estimating the share of the relevant subpopulation that requires housing-related support.

Already Living in or Not Ready for Supportive Housing

In arriving at estimates of unmet need (net requirements) for housing with support, it is also necessary to net out two other populations:

a) Currently living in housing with support

The Wellesley Institute report *Taking Stock of Supportive Housing*[20] identifies approximately 23,000 households in Ontario (including persons in rooms/beds in congregate housing) that currently receive housing with support in regard to mental illness or addictions. This includes housing targeted to chronic homelessness, for people with a high prevalence of mental illness or addictions.

b) Residing in institutions and not ready for community living

Many or most people in institutions such as mental health hospitals are able to live successfully in the community if housing with support is provided, but not all. Some number of people at any given point in time are in institutions and not able to leave for legal or medical reasons. This may include people hospitalized or in quasi-institutional settings with very severe mental illness, people who also have long term care needs, and those who are in jail, prison, or other correctional facilities.

Data to measure this precisely are not readily available. Nevertheless, the general magnitude can be estimated from hospital and correctional (prison and jail) data:

- Nearly 5,200 adults had a long-stay or ALC hospital day for mental health or addictions (fiscal 2007).[21] This would include some – probably a minority – who have a home in the community.
- Ontario has about 8,000 people in correctional institutions. This comprises sentenced custody, as well as remand and other temporary detention; it excludes people on probation, parole, or subject to statutory release or long-term supervision, and conditional sentences. The precise number was 8,253 (2013/14) and 7,785 (2014/15).[22] The prison and jail population has a relatively high incidence of mental illness, especially once addictions are included. It has been reported that in 2007 about one-fifth used prescribed medication for mental health issues; the estimated incidence of mental

20 Greg Suttor (2016), *Taking Stock of Supportive Housing in Ontario* (Toronto: Wellesley Institute).

21 Dale Butterill, Elizabeth Lin, Janet Durbin, Yona Lunsky, Karen Urbanoski, and Heather Soberman (2009), *From Hospital to Home: The Transitioning of Alternate Level of Care and Long-stay Mental Health Clients* (Toronto: Centre for Addiction and Mental Health), p. 13ff.

22 Statistics Canada, "Adult Correctional Statistics in Canada, 2014/2015" http://www.statcan.gc.ca/pub/85-002-x/2016001/article/14318-eng.htm (accessed October 2016).

illness is in the range of one-half to two-thirds, and up to 85 percent if substance use is included.[23]

These population estimates are broad rather than precise. Moreover they do not translate directly to households. The cascading propensities that are elaborated above will not apply precisely to these institutionalized populations, as the incidence of low income will be much higher here. The corresponding number of households appears likely to be approximately one-fifth or less of the combined 11,000 population in these two categories. This implies a preliminary estimate of about 2,000 households.

There is an interaction effect between the hospital and prison/jail population and need for housing-related support: institutionalized population could be lower if sufficient supportive housing were available. This consideration is not specifically factored into the estimates in this report.

The sum of households currently in supportive housing and a household-equivalent count of population in hospitals, prisons, or jails is approximately 25,000. This is a preliminary estimate. This is subtracted from the estimate of need that is generated based on the factors discussed in the preceding subsections.

Preliminary Population-based Estimate of Need

Table 5 sets out the cascading set of probabilities discussed above, thereby estimating a range of population-based need for housing with supports for to mental illness and addictions in Ontario.

Table 5

Estimated Need for Housing With Supports

(Serious Mental Illness and Addictions):

Range of Probabilities based on Cascading Factors

Prevalence of serious mental illness &/or addictions	4%				2%			
	↓		↓		↓		↓	
Percent forming their own household	60%		70%		60%		70%	
	↓	↓	↓	↓	↓	↓	↓	↓
Percent that have low income	30%	40%	30%	40%	30%	40%	30%	40%
	↓	↓	↓	↓	↓	↓	↓	↓
Requiring supports to maintain stable tenancy	50% to 70%				50% to 70%			
	↓	↓	↓	↓	↓	↓	↓	↓
Prevalence of need for housing with supports (households needing housing with support, as a percentage of total adult population)	0.7	1.0	0.8	1.1	0.4	0.5	0.4	0.6

Source: Probabilities based on Tables 1, 3, and 4, and related discussion in text.

23 Maire Sinha (2009), *An Investigation into the Feasibility of Collecting Data on the Involvement of Adults and Youth with Mental Health Issues in the Criminal Justice System* (Statistics Canada, Crime and Justice Research Paper Series, cat. 85-561-M).

However, if a broad definition of severe mental illness is used (4 percent prevalence) then the incidence of need for housing-related support will be pulled lower, and if a narrow definition is used (2 percent prevalence) it will be pulled higher. Therefore it is reasonable to omit the high and low outliers. The resulting estimated need for housing with support is in the range of 0.5 percent to 1.0 percent of the population age 15 or more.

These propensities can now be applied to the actual population of Ontario from Table 2 above. Table 6 uses the 0.5 percent to 1.0 percent ratios generated above and applies them to that population, to produce an estimate of the need for housing with support, expressed as a number of households or housing units.

Population growth

The remaining factor to be considered is population growth. The need for supportive housing is a function not only of existing need, but of ongoing growth.

Ontario's population age 15 and up is projected to grow by about 1.1 percent annually – or 11 percent decennially, i.e. 1.3 million people added each decade. The projected growth rate (age 15 up) is much higher in Greater Toronto, at approximately 15 to 16 percent per decade or 0.9 million. It is projected at 7 percent per decade in the rest of the province, or 0.4 million.[24]

Table 6

Estimated Range of Need for Housing with Support: Ontario

(mental illness or addiction)

	Ontario Population estimate 2015 (age 15+): 11,600,000					
Prevalence, need for housing with support	0.5%	0.6%	0.7%	0.8%	0.9%	1.0%
Resulting need for housing with support	58,000	70,000	81,000	93,000	104,000	116,000
Existing housing with support + institutional	25,000	25,000	25,000	25,000	25,000	25,000
Net requirement, added housing with support	33,000	45,000	56,000	68,000	79,000	91,000

Source: Prevalence from cascading propensities in Table 5; the low (0.4%) & high (1.1%) outliers are omitted – see text.

Population estimates 2016 from Ministry of Finance projections (predating availability of 2016 census).

Applying this to the estimated population-based need for supportive housing yields the following requirements to keep pace with population growth (Table 7).

24 Calculated from Ontario Ministry of Finance (2014), Ontario Population Projections, 2013–2041, Tables 6 and 10 (Reference Scenario). Accessed at http://www.fin.gov.on.ca/en/economy/demographics/projections/table4.html. Decennial increase for Ontario population (millions, age 15+) in overlapping decades: 1.335 (2016-26), 1.366 (2021-31), respectively 11.4 and 11.0 percent. Decennial increase for the GTA (millions) 0.904 (2016-26), 0.927 (2021-31), respectively 16.0 and 15.2 percent.

Table 7 Growth-related Needs in Ontario	
Existing Need for Supportive Housing (alternative estimates)	Units Needed Annually to meet Population Growth (1.1%/year)
58,000	640
70,000	770
81,000	890
93,000	1,020
104,000	1,140
116,000	1,280
Source: Col. 1 from Table 6, 1.1% growth per text. Note: The netting out of existing supportive housing does not apply to growth calculations.	

Conclusions

This report has generated an estimate of the need for housing with support for mental illness and addictions. This is based on cascading prevalence and propensities of severe mental illness, household formation, low income, need for support in this subset, and bearing in mind the population already in housing with support (or in institutions and not ready).

The low end of these estimates is a net requirement of 33,000 units for existing need, plus 640 units annually for population growth. If expressed in terms of units required over a period of a decade, this equates to approximately 4,000 units annually. The corresponding high estimate is 10,000 units annually.

This estimate does not include people who may need housing support due to long-term homelessness and related disabilities or chronic conditions, but do not have a serious mental illness or addiction.

Appendices

Appendix 1 – Comparison to Other Estimates

a) Turning the Key

The Mental Health Commission of Canada's *Turning the Key* report[25] provides some general estimates of need the need for supportive housing for mental illness and addictions; it does not provide an overall population-based estimate.

It cites the prevalence of mental illness in the population, as well as estimates that 30 to 50 percent of the homeless population have serious mental illness, and estimates that 20 to 40 percent of people living with serious mental illness are inadequately housed.[26] It cites the Kirby report data,[27] and notes that this excludes those who are homeless or 'hidden homeless' such as couch surfers. It also notes prior estimates of the incidence of inadequate housing and Core Housing Need (closely related categories) among people with serious mental illness, prevalence of the latter, and the latter among homeless people.

Table 8

Estimates of Housing Need in Turning the Key

Counts of individuals with serious mental illness	Ontario	Canada
1. Total with serious mental illness (based on 2 – 5% prevalence rate)	199,000 – 498,000	521,000 – 1,302,000
2. Inadequately housed (at 20 – 40% of line 1)	40,000 – 199,000	104,000 – 521,000
3. In Core Housing Need (at 27% of line 1 range)	54,000 – 134,000	141,000 – 352,000
4. Homeless with mental illness (at 30–40% of homeless population – see sources below)	17,000 – 46,000	45,000 – 120,000
Source: Trainor et al (2012), Turning the Key. Data rounded here to nearest 1,000.		
Total homeless population used to compute line 4 (at 0.58 – 1.7% of total population):	58,000 – 115,000	151,000 – 299,000

On this basis, *Turning the Key* estimated the range of housing need among people with serious mental illness, shown in Table 8.[28] For Ontario, the low to middle values in lines 2 and 3 of this table are in the same range as the estimates in the present report.

25 John Trainor, Peggy Taillon, Nalini Pandalangat, et al. (2012), *Turning the Key: Assessing Housing and Related Supports for Persons Living with Mental Health Problems and Illness* (Mental Health Commission of Canada and Centre for Addiction and Mental Health).

26 ibid, p. 89.

27 The Kirby data that 27 percent of people with mental illness are in Core Housing Need is mis-cited as 27 percent being homeless.

28 It should be noted that Inadequate housing and Core Need are closely related categories, and that homeless in this source appears to refer to absolute homelessness.

b) Kirby Report

The 2006 Senate committee report on mental illness and addictions (Kirby report)[29] provided an estimate of the number of housing units required to bring the incidence of Core Housing Need among people with mental illness or addictions down to the average level for the Canadian population.[30]

The report cited tabulations prepared by Canada Mortgage and Housing Corporation for the senate committee, that while 15% of the overall Canadian population is in Core Need, for people living with mental illness it is 27% (approximately 140,000 people). The report concluded on that basis that approximately 57,000 new affordable housing units were needed to bring down the proportion of people living with mental illness down to the level for the Canadian population overall. See below on a pro rata application of this to Ontario.

c) AMHO, Time for Concerted Action on Supportive Housing

This report called for 26,190 added units of supportive housing, citing a range of related needs indicators.

It is understood that this figure was intended to correspond to other indicators of need. It is approximately equivalent to the numbers on The Access Point waiting list in the City of Toronto, factored up to provincial population. It also has equivalency to the Kirby report number, factored down from nation to Ontario population, with some adjustment. (The 26,190 is 45 percent of the Kirby 57,000 while Ontario is 38 percent of national population.) The figure was also triangulated on a bottom-up basis from the mix of types of housing with support that, based on the experience of providers, is needed in Toronto.[31]

d) Estimates for Calgary – Waegemakers Schiff, Schiff and Schneider

Waegemakers Schiff et al.[32] estimated the need for supportive housing in Calgary by calculating (a) the known prevalence of schizophrenia, and (b) the relative proportions of people with schizophrenia and other mental health or addictions diagnoses in existing supportive housing.

The rationale is approximately as follows. Schizophrenia is more prevalent than other conditions among those in supportive housing for mental illness and additions. This is due to its severe effects on employment, social support, and personal stability. Its prevalence is clearly measured. Other diagnoses may have less clear-cut or universal implications for housing support. The relative presence in supportive housing of people with such other diagnoses is an indicator of the extent to which those other conditions lead to a need for housing with support. The sum of these two terms (prevalence of schizophrenia, and the ratio of other diagnoses in supportive housing) yields an overall measure of need for supportive housing.

The researchers noted that the prevalence of schizophrenia in various jurisdictions is 0.3 to 2 percent, and 0.8 percent in Calgary. They found, from three prior studies, that the percentage of persons with schizophrenia in supportive housing (for mental illness and addictions) was 55 percent (± 5 %) in various

29 Canada, Standing Senate Committee on Social Affairs, Science and Technology (2006), *Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada* (Final Report of The Standing Senate Committee on Social Affairs, Science and Technology, Hon. Michael J.L.Kirby, Chair) [Kirby report].

30 ibid, section 16.5.3, "Mental Health Housing Initiative" at http://www.parl.gc.ca/Content/SEN/Committee/391/soci/rep/rep02may06part6-e.htm#_Toc133223358

31 Communication, supportive housing providers.

32 Waegemakers Schiff, Schiff and Schneider (2014).

jurisdictions. On that basis they calculate the need for supportive housing.

The implied *rate* of need for supportive housing, although only an absolute figure is set out in the article, is (0.8) + (0.45 / 0.55 x 0.8) = 1.45 percent of adult population.

If applied to the 2011 Ontario or Greater Toronto population, this 1.45 percent would yield respectively 160,000 and 72,000. This is considerably higher than the estimates in the present report.

e) Disability Survey Data and Housing Need

The Statistics Canada 2001 *Participation and Activity Limitation Survey* included data for persons with specific disabilities, one of these being "emotional/ psychological." CMHC analysed the 2001 PALS data with respect to housing need, for people age 15 or more.[33] Data for individuals are tabulated according to whether they live in Core Housing Need. The latter refers to housing that costs no more than 30 percent of household income and is not overcrowded or in serious disrepair, for households with income below the level where local average rents are affordable. Although PALS includes data on "severe" and "very severe" emotional/ psychological disability, housing need was not reported for those subgroups.

The incidence of Core Housing Need was much higher (age 15 up) for people with an emotional / psychological disability, at 22.7 percent versus 9.1 percent of those without a disability. Among those (age 15 up) in renter households, 37.2 percent with an emotional /psychological disability were in Core Need compared to 21.1 percent for those without disabilities.

The higher incidence of Core Need was almost entirely in the age 45-64 bracket, where 42 percent of people with an emotional /psychological disability were in Core Need versus 23 percent of those without disabilities. This age pattern applied with minor differences to both men and women. Although the data do not disaggregate this, it is highly likely that this is correlated with the higher incidence of living alone, i.e. with only one's own income, and the lower incidence of living in a family with children, i.e. with more than one earner on average. Living alone and having an emotional /psychological disability in the peak earning years are strong contributors to high housing need for people with mental health problems.

f) Wellesley Institute, Low income and mental illness (CCHS Data)

Data from the CCHS for the Wellesley Institute's report (2010) *Poverty is Making Us Sick* indicated that the overall incidence of mental and behavioural disorders in the lowest quintile of personal income is 14.6 percent (146 per 1,000). The appropriate interpretation is primarily that mental illness or addictions makes it more likely that a person will be poor; and secondly that low income may also put one at greater risk of some mental illnesses or addictions.

The 14.6 percent has been cited without appropriate caveats as indicating the incidence of need for housing-related supports in the low-income population, or in specific subsets of it. This is not a reasonable or reliable inference on the basis of these CCHS data and is certainly too high.[34] It also creates a risk that it will be cited in ways that contribute to stigmatization and stereotyping of people with low incomes.

33 Canada Mortgage and Housing Corporation (2010), *2001 Participation and Activity Limitation Survey: Issue 4—Profile of the Housing Conditions of Canadians Aged 15 Years and Older with an Emotional/Psychological Disability* (Research Highlight).

34 In addition, the reliability of sub-population estimates in these data requires further review. As well, the Inclusion of age-related dementia, together with high frequency of low income among the elderly, makes it possible that data overstate the prevalence of mental disorders among the general low-income adult population.

g) Homeless people with serious mental illness and addictions

Numerous sources show a high prevalence of serious mental illness and addictions among people experiencing chronic homelessness. This combination is direct evidence of need for housing with supports.

None of these provides an estimate for Ontario. Given that many people are housed but at high risk of homelessness or problematic mental health, the number of homeless people with serious mental illness or addiction is not the total need for housing with support, but rather a significant subset.

h) Long hospital stays and ALC for mental illness and addictions

In the Ontario hospital system, people occupying hospital beds who no longer require that level of care but cannot be discharged, usually due to lack of suitable housing or care available upon discharge, are designated ALC (Alternate Level of Care). A significant share of people in this situation have mental illness or addictions and the key thing in the way of suitable discharge is lack of suitable housing with supports. In addition, many people with these needs have long hospital stays.

Butterill et al.[35] provide data on this based on Ontario health system data for 2007/08. Highlights are:

- There were 5,520 people hospitalized for mental health and addictions reasons who had either long stays or some ALC days.
- Although some were hospitalized for shorter periods, stays of over 90 days were prevalent, and this group and it accounted for 1.06 million bed-days which were either long stays or ALC.
- The long-stay and ALC bed-days among this population accounted for half (51 percent) of ALC and long/stay days among all categories of long-stay patients,
- The long-stay and ALC bed-days comprised half (48 percent) of all patient-days for mental health or addictions needs.

In sum, people hospitalized with mental health issues or addictions who are either there for long periods or become ALC are a significant part of the ALC issue, encountering significant barriers to suitable discharge in to the community. The implication for supportive housing is by no means direct, but if the 1.06 million bed-days were full-year stays, it would equate to 2,900 persons.

This is a measure of fairly severe needs and is much smaller than the broader estimates arrived at above.

35 Butterill et al. (2009) From Hospital to Home, pp. 12ff, 55-56.

Appendix 2 – Selected Evidence on Prevalence of Serious Mental Illness

Table A.1 Prevalence of Mental Illness and Addictions in Canada (CCHS)		
	Prevalence, Age 15+ (percent of population)	
	Lifetime	1-year
Any selected disorder (mental or substance)	33.1	10.1
Any mood disorder	12.6	5.4
Major depressive episode	11.3	4.7
Bipolar disorder	2.6	1.5
Generalized anxiety disorder	8.7	2.6
Any substance use disorder (alcohol or drug)	21.6	4.4
Suicidal thoughts	11.9	3.3
Perceived mental health, fair or poor	7.8	1.3
Schizophrenia or psychosis*	-	1.3
Post-traumatic stress disorder*	-	1.7
Eating disorder*	-	0.4
Attention deficit disorder*	-	2.6
Source: Canadian Community Health Survey, 2012, CANSIM table 105-1101 * Current diagnosed condition (not 1-year prevalence)		

Table A.2

Estimates of Severe Mental Illness and Addictions in BC

	12-month Prevalence per 100	Percent Severe	Calculated Prevalence of "Severe"	"Severe" net of Assumed 50% Co-morbidity
	(a)	(b)	(c)	(d)
Major Depressive Disorder	4.1	35%	1.4	0.7
Dysthymia	1.5	36%	0.6	0.3
Bipolar	0.7	55%	0.4	0.2
Anxiety	12.6	22%	2.8	1.4
Schizophrenia	0.3	70%	0.2	0.1
Psychotic NOS	0.5	40%	0.2	0.1
Substance Abuse Dependence	8.4	30%	2.5	1.25
Eating Disorders (Anorexia Nervosa)	0.6	10%	0.1	0.05
TOTAL			6.3%	3.2%

Source: Columns a & b from Patterson et al. (2007), Section 3, table 1.

(All source data rounded here to 1 decimal. 'Delusional' omitted here due to incidence ≤0.3%).

Columns c & d calculated here from that data; the 50% assumed co-morbidity is from Patterson et al.

Overall prevalence calculated here on 2006 BC population.

Dysthymia is persistent mild to moderate depression.

Table A.3

Prevalence of Serious Mental Illness in the USA

	Total 1-Year Prevalence	'Serious'	Resulting Prevalence of 'Serious' Disorder*
	% of population	% of col 1	% of population
ANXIETY DISORDERS			
Panic disorder	2.7	44.8	1.2
Agoraphobia without panic	0.8	40.6	0.3
Specific Phobia	8.7	21.9	1.9
Social Phobia	6.8	29.9	2.0
Generalized anxiety disorder	3.1	32.3	1.0
Posttraumatic stress disorder	3.5	36.6	1.3
Obsessive-compulsive disorder	1.0	50.6	0.5
Separation anxiety disorders	0.9	43.3	0.4
Any anxiety disorder	18.1	22.8	4.1
MOOD DISORDERS			
Major depressive disorder	6.7	30.4	2.0
Dysthymia	1.5	49.7	0.7
Bipolar I and II disorders	2.6	82.9	2.2
Any mood disorder	9.5	45.0	4.3
IMPULSE CONTROL DISORDERS			
Oppositional defiant disorders	1.0	49.6	0.5
Conduct disorders	1.0	40.5	0.4
Attention-deficit/hyperactivity disorders	4.1	41.3	1.7
Intermittent explosive disorder	2.6	23.8	0.6
Any impulse control disorders	8.9	32.9	2.9
SUBSTANCE DISORDERS			
Alcohol abuse	3.1	28.9	0.9
Alcohol dependence	1.3	34.3	0.4
Drug abuse	1.4	36.5	0.5
Drug dependence	0.4	56.5	0.2
Any substance disorder	3.8	29.6	1.1
ANY DISORDER			
Any	26.2	22.3	5.8
1 disorder	14.4	9.6	1.4
2 disorders	5.8	25.5	1.5
> 3 disorders	6.0	49.9	3.0

Source: Kessler et al (2005), from National Comorbidity Survey Replication (English-speaking US population age 18+). Right-hand column calculated here.

Selected categories were assessed on subsamples rather than the full sample.

Schizophrenia omitted (see text). Impulse control disorders are with reference to respondents age 18 to 44.

Table A.4

Twelve-month Prevalence of DSM-IV Disorders in Five Countries, With Severity

	Canada	Chile	Germany	Netherlands	USA
	Percent of population				
Type of Disorder					
Mood disorder	4.9	9.0	11.9	8.2	10.7
Anxiety disorder	12.4	5.0	11.9	13.2	17.0
Substance use disorder	7.9	6.6	5.2	9.9	11.5
Any disorder	19.9	17.0	22.8	24.4	29.1
Severity of Disorder					
None	80.1	83.0	77.2	75.6	70.9
Mild	12.4	8.1	10.8	14.1	13.8
Moderate	3.6	5.5	6.6	4.2	7.0
Serious	3.9	3.3	5.4	6.1	8.2

Source: Bijl et al. (2003), Exh. 2, data from World Health Organization compilation of national surveys of adult population in 1990-99 period. See caveats in source regarding comparability.

Table A.5

Twelve-month Prevalence of Various Mental Health Disorders (simplified summary)

	Schizophrenic Disorder	Anxiety Disorder	Mood Disorder	Substance use Disorder
	Percent of population			
Prevalence range (95% confidence interval)	0.6–1.2"%	7.5–14.3%	5.7–9.7%	6.4–10.9%
Best estimate of prevalence	0.85%	10.6%	7.5%	8.4%

Source: Goldner et al., (2002); Waraich et al. (2004); Somers et al. (2004), Somers et al. (2006).

Appendix 3 – Definitions of Severity

a) Kessler et al. (2005)

Kessler et al. classify the DSM-IV mental disorders as serious or severe (both terms are used) based on a mix of specific behavioural and diagnostic impacts. These include multiple days 'out of role', days entirely unable to carry out normal daily activities, certain diagnoses, ratings on the Sheehan Disability Scale, and suicide attempts or violence. Verbatim text as follows:

Twelve-month cases were classified as serious if they had any of the following: a 12-month suicide attempt with serious lethality intent; work disability or substantial limitation due to a mental or substance disorder; positive screen results for non-affective psychosis; bipolar I or II disorder; substance dependence with serious role impairment (as defined by disorder-specific impairment questions); an impulse control disorder with repeated serious violence; or any disorder that resulted in 30 or more days out of role in the year. Cases not defined as serious were defined as moderate if they had any of the following: suicide gesture, plan, or ideation; substance dependence without serious role impairment; at least moderate work limitation due to a mental or substance disorder; or any disorder with at least moderate role impairment in 2 or more domains of the Sheehan Disability Scale. (The Sheehan Disability Scale assessed disability in work role performance, household maintenance, social life, and intimate relationships on 0-10 visual analog scales with verbal descriptors and associated scale scores of none, 0; mild, 1-3; moderate, 4-6; severe, 7-9; and very severe, 10.)... To assess the meaning of the severity ratings, we compared number of days in the past 12 months respondents were totally unable to carry out their normal daily activities because of mental or substance problems. The mean of this variable was significantly higher (F = 17.7; P<.001) among respondents classified as serious (88.3) than those classified as moderate (4.7) or mild (1.9).

b) Patterson et al. (2007)

Patterson et al. defined "severe" addictions and/or mental illness (SAMI) based on functional capacity, that is, the person's ability to actively engage in personal, social, and occupational areas of daily life. Verbatim text as follows (p. 16 in original 2007 version):

Given that many individuals whose illnesses do not fall into the categories of psychotic and/or severe mood disorders but who are nonetheless chronically impaired by mental illness and/or substance abuse, we defined SAMI across all of the major mental disorders (Axis I, see DSM-IV-TR) based on estimates of functional capacity (i.e., an individual's ability to actively engage in personal, social, and occupational areas of daily life...)...

It should be noted that our definition of SAMI is somewhat more inclusive than what has been widely used in the past (e.g., NIMH, 1987; Slade et al., 1997). Our definition includes all mood, anxiety and substance use disorders, which are more prevalent in the general population than bipolar and psychotic disorders. While it may be argued that most mood and anxiety disorders are not as severe as psychotic and bipolar disorders, many individuals with Major Depressive Disorder, Post-Traumatic Stress Disorder, Obsessive Compulsive Disorder, Panic Disorder, and Substance Use Disorders are severely impaired. We believe that a definition of SAMI that does not include these disorders underestimates the population that is functionally impaired due to mental illness and in need of housing-related support services.

Our definition of SAMI does not include personality disorders, which often result in long-standing disability.

Inter-rater reliability for personality disorders (Axis II) is much lower than for Axis I disorders (Zimmerman, 1994), and the population prevalence and severity prevalence information is not as reliable. However, the majority of these individuals also have an Axis I diagnosis and should therefore be captured in our estimates. Similarly, we did not include cognitive disorders such as mental retardation, acquired brain injury, fetal alcohol syndrome, dementia, etc. However, 75% of these individuals have a primary diagnosis of mental illness (CARMHA, 2006) and should thus be included in our estimates. We recognize that these disorders result in significant functional impairment, however, the scope of the current project was limited to the major Axis I disorders.

c) Bijl et al. (2003)

Bijl et al. constructed a three-level index of severity based on the type of mental health disorder and its generalized impacts, as understood from other sources, on role impairment. Verbatim text as follows:

To assess severity, we classified respondents with disorders into mild, moderate, and serious cases based on their multivariate disorder profiles. This is only a rough classification because no direct data on severity were collected consistently across the surveys [i.e. in the five different countries]. (p. 127)

A variable ranging between 1 and 20 was constructed for all respondents who met criteria for at least one of the disorders. Some disorders were given one point (dysthymia and simple phobia), others two points (agoraphobia, social phobia, and substance abuse disorders), and others four points (generalized anxiety disorder, major depression, mania, and panic disorder), based on preliminary analyses of the effects of the disorders in predicting summary measures of role impairment. Severity categories were defined based on summary scores as follows: 1–2, mild; 3–4, moderate; and 5–20, serious. (footnote 19)

Even though the severity measure is coarse, it is strongly related to probability of treatment in all countries. This is most reasonably interpreted to mean that demand for treatment was related to severity, presumably mediated by distress and impairment. There is also indirect evidence that the treatment system was responsive to severity in at least three of the countries, as indicated by proportional treatment in the specialty sector increasing with severity. (p. 130)

d) Canadian Survey on Disability (2012) data used in OHRC *By the Numbers* report

The Canadian Survey on Disability ranks "severe" mental/psychological disability on the basis of impacts on activities as reported by the respondent, rather than on the basis of a medical diagnosis. The definition information provided applies to all categories of disability and is not specific to mental heath.

Source: Statistics Canada, *Canadian Survey on Disability, 2012: Concepts and Methods Guide* (2014, cat. 89–654–X — No. 2014001) http://www.statcan.gc.ca/pub/89-654-x/89-654-x2014001-eng.htm

Verbatim text as follows (pp. 9-10):

A severity score was developed using the Disability Screening Questions (DSQ). For each of the 10 disability types, a score is assigned using a scoring grid that takes into account both the frequency of the activity limitations (never, rarely, sometimes, often, or always) and the intensity of the difficulties (no difficulty, some difficulty, a lot of difficulty, or cannot do). The score increases with the frequency of the limitation and the level of difficulty.

A global severity score is derived based on all disability types. A person's global severity score is calculated by taking the average of the scores for the 10 disability types. Consequently, the more types of disability a person has, the higher his or her score will be.

Overall, the global score meets the following three criteria:

- *it increases with the number of disability types;*
- *it increases with the level of difficulty associated with the disability;*
- *it increases with the frequency of the activity limitation.*

To make the severity score easier to use, severity classes were established…

1 = mild disability

2 = moderate disability

3 = severe disability

4 = very severe disability

References

Addictions and Mental Health Ontario. 2014. *Time for Concerted Action on Affordable Housing: The Case for Investment in Supportive Housing* (Toronto: AMHO).

Bijl, Rob V., Ron de Graaf, Eva Hiripi, Ronald C. Kessler, Robert Kohn, David R. Offord, T. Bedirhan Ustun, Benjamin Vicente, Wilma A.M. Vollebergh, Ellen E. Walters, and Hans-Ulrich Wittchen. 2003. "The Prevalence Of Treated and UntreatedMental Disorders In Five Countries" *Health Affairs* 22 (3): 122-133.

Dale, Elizabeth Lin, Janet Durbin, Yona Lunsky, Karen Urbanoski, and Heather Soberman. 2009. *From Hospital to Home: The Transitioning of Alternate Level of Care and Long-stay Mental Health Clients* (Toronto: Centre for Addiction and Mental Health).

Canada, Standing Senate Committee on Social Affairs, Science and Technology.2006. *Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada* (Final Report of The Standing Senate Committee on Social Affairs, Science and Technology, Hon. Michael J.L.Kirby, Chair) [Kirby report].

Canada Mortgage and Housing Corporation. 2010. *2001 Participation and Activity Limitation Survey: Issue 4—Profile of the Housing Conditions of Canadians Aged 15 Years and Older with an Emotional/ Psychological Disability.* Research Highlight (Ottawa: CMHC).

Canada Mortgage and Housing Corporation. 2013. *Long-Term Household Growth Projections – 2013 Update* (Ottawa: CMHC).

Durbin, Janet, Lindsey George, Christopher Koegl, and Caitlin Aitchison-Drake. 2005. *Review of Ontario Mental Health Supportive Housing System and Potential Data Sources for System Monitoring* (prepared for the Ontario Ministry of Health and Long Term Care).

Goldner, Elliot M., Lorena Hsu, Waraich, Paul, and Julian M. Somers. 2002. "Prevalence and Incidence Studies of Schizophrenic Disorders: A Systematic Review of the Literature" *Canadian Journal of Psychiatry* 47 (9): 833–843.

Henderson Scott, Gavin Andrews, and Wayne Hall. 2000. "Australia's Mental Health: Overview of the General Population Survey" *Australia & New Zealand Journal of Psychiatry* 34 (2):197–205.

Kessler, Ronald C., Wai Tat Chiu, Olga Demler, and Ellen E. Walters. 2005. "Prevalence, Severity, and Comorbidity of 12-Month DSM-IV Disorders in the National Comorbidity Survey Replication" *Archives of General Psychiatry* 62 (6): 617-627.

Lightman, Ernie, Andrew Mitchell, and Beth Wilson. 2008. *Poverty is Making us Sick: A Comprehensive Survey of Income and Health in Canada* (Wellesley Institute and Community Social Planning Council of Toronto).

Murphy, Michael J. 1991. "Modelling Households: A Synthesis" *Population Studies* 45 (supp.): 157-176.

Offord, David R., Michael H. Boyle, Dugal Campbell, Paula Goering, Elizabeth Lin, Maria Wong, and Yvonne A Racine. 1996. "One-Year Prevalence of Psychiatric Disorder in Ontarians 15 to 64 Years of Age" *Canadian Journal of Psychiatry* 41: 559-563.

Ontario, Ministry of Finance. 2014. *Ontario Population Projections, 2013–2041*, Tables 6 and 10 (Reference Scenario). http://www.fin.gov.on.ca/en/economy/demographics/projections/table4.html.

Ontario, Office of the Auditor General of Ontario. 2008 *2008 Annual Report* (Toronto: Queen's Printer).

Ontario, Provincial Community Mental Health Committee. 1988. *Building Community Support for People: A Plan for Mental Health in Ontario* (Toronto: Provincial Community Mental Health Committee) [Graham Report].

Ontario Human Rights Commission. 2015. *By the Numbers: A Statistical Profile of People with Mental Health and Addiction Disabilities in Ontario* (Toronto: OHRC).

Patterson, Michelle, Julian Somers, Karen McIntosh, and Alan Shiel. 2007. *Housing and Support for Adults with Severe Addictions and/or Mental Illness in British Columbia* (Burnaby BC: Centre for Applied Research in Mental Health & Addiction, Simon Fraser University. Prepared for the BC Ministry of Health).

Rush, Brian, Karen Urbanoski, Diego Bassani, Saulo Castel, T. Cameron Wild, Carol Strike, Dennis Kimberley, and Julian Somers. 2008. "Prevalence of Co-occurring Substance Use and Other Mental Disorders in

the Canadian Population" *Canadian Journal of Psychiatry* 53 (12): 800–809.
Sinha, Maire. 2009. *An Investigation into the Feasibility of Collecting Data on the Involvement of Adults and Youth with Mental Health Issues in the Criminal Justice System* (Statistics Canada, Crime and Justice Research Paper Series, cat. 85-561-M).
Somers, Julian M., Elliot M. Goldner, Paul Waraich, and Lorena Hsu. 2006. "Prevalence and Incidence Studies of Anxiety Disorders: A Systematic Review of the Literature" *Canadian Journal of Psychiatry* 51, 100-13.
Somers, Julian M., Elliot M. Goldner, Paul Waraich, and Lorena Hsu. 2004. "Prevalence Studies of Substance-related Disorders: A Systematic Review of the Literature" *Canadian Journal of Psychiatry* 49 (6): 373-384
Statistics Canada, "Adult Correctional Statistics in Canada, 2014/2015" http://www.statcan.gc.ca/pub/85-002-x/2016001/article/14318-eng.htm (accessed October 2016).
Statistics Canada. 2014. *Canadian Survey on Disability, 2012: Concepts and Methods Guide*. cat. 89–654–X — No. 2014001) http://www.statcan.gc.ca/pub/89-654-x/89-654-x2014001-eng.htm
Suttor, Greg. 2016. *Taking Stock of Supportive Housing in Ontario* (Toronto: Wellesley Institute).
Trainor, John, Peggy Taillon, Nalini Pandalangat, et al. 2012. *Turning the Key: Assessing Housing and Related Supports for Persons Living with Mental Health Problems and Illness* (Ottawa: Mental Health Commission of Canada, and Toronto: Centre for Addiction and Mental Health).
Waegemakers Schiff, Jeanette, Rebecca Schiff, and Barbara Schneider. 2014. "Developing an Estimate of Supported Housing Needs for Persons with Serious Mental Illnesses" *International Journal of Population Research*, Volume 2014 (online, DOI 10.1155/2014/245024).
Waraich, Paul, Elliot M. Goldner, Julian M. Somers, and Lorena Hsu. 2004. "Prevalence and Incidence Studies of Mood Disorders: A Systematic Review of the Literature" *Canadian Journal of Psychiatry* 49 (2): 124-138.

Finding the Way Forward: Equitable Access to Pharmacare in Ontario

Toronto Public Health: Sarah Sanford, Jia Hu, and Jan Fordham
Wellesley Institute: Lauren Bates, Brenda Roche, Scott Leon, and Steve Barnes

Toronto Public Health

Wellesley Institute
advancing urban health

September 2018

Reference:
Toronto Public Health and Wellesley Institute. Finding the Way Forward: Equitable Access to Pharmacare in Ontario. September 2018.

Authors:
Toronto Public Health: Sarah Sanford, Jia Hu, and Jan Fordham.
Wellesley Institute: Lauren Bates, Brenda Roche, Scott Leon, and Steve Barnes.

Acknowledgements:
We appreciate the guidance and input provided by Kate Bassil (Toronto Public Health).
We would like to acknowledge the leadership of Eileen de Villa, Gayle Bursey and Jann Houston (Toronto Public Health), and Kwame McKenzie (Wellesley Institute).

We are very grateful to Steve Morgan (Faculty of Medicine, School of Population and Public Health, University of British Columbia), and Danielle Martin (Department of Family and Community Medicine and School of Public Policy and Governance, University of Toronto, Medical Affairs and Health System Solutions, Women's College Hospital) for their thorough feedback on a previous version of this report.

Copies:
This report is available on the Toronto Public Health website at https://www.toronto.ca/city-government/data-research-maps/research-reports/public-health-past-significant-reports/healthy-public-policy-reports-library/ and on the Wellesley Institute website at http://www.wellesleyinstitute.com/health/

The mission of Toronto Public Health is to reduce health inequities and improve the health of Toronto residents through provision of programs and services, advocacy, and research and policy development. Wellesley Institute is a non-profit research and policy institute with a mission to improve health and health equity, through action on the social determinants of health for communities across the Greater Toronto Area (GTA).

For further information:

Healthy Public Policy Directorate
Toronto Public Health
277 Victoria Street, 7th Floor
Toronto, Ontario, M5B 1W2
Telephone: 416-392-6788
Email: publichealth@toronto.ca

Wellesley Institute
10 Alcorn Ave,
Toronto, Ontario, M4V 3A9
Telephone: 416-972-1010
Email: contact@wellesleyinstitute.com.

Statement on Acknowledgement of Traditional Land
We would like to acknowledge this sacred land on which the Wellesley Institute operates. It has been a site of human activity for 15,000 years. This land is the territory of the Huron-Wendat and Petun First Nations, the Seneca, and most recently, the Mississaugas of the Credit River. The territory was the subject of the Dish With One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes.

Today, the meeting place of Toronto is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work in the community, on this territory.

Revised by the Elders Circle (Council of Aboriginal Initiatives) on November 6, 2014

TABLE OF CONTENTS

Executive Summary

There are significant gaps in drug coverage in Ontario. In 2014, one quarter of Ontarians aged 12-64 lacked prescription medication insurance. This lack of insurance results in some people not taking their medications as prescribed which contributes to poor health outcomes and increased use of health services. This burden falls disproportionately on lower income groups who have poorer health outcomes than higher income groups.

In December 2015, the Toronto Board of Health and Toronto City Council endorsed the creation of a universal, national pharmacare program. While there have been policy discussions nationally about expanding drug coverage, and recent changes provincially to extend drug coverage to youth and children without private insurance, gaps remain that create disproportionate health risks for certain social groups. An effective drug coverage policy ensures equitable access to prescription medications.

There exists a complex arrangement of publicly funded drug coverage programs, which creates uneven access to prescription drugs. The three main drug coverage models in Canada include targeted drug coverage for specific populations (e.g., based on income or age), catastrophic coverage which extends prescription drug coverage to people who have high out-of-pocket costs for prescriptions relative to income, and insurance-based coverage, which requires that people buy into a health insurance plan to access drug coverage. In addition, some employers provide health benefit plans that cover drug costs for their employees. Many precarious low-wage workers in Ontario and across Canada do not receive drug benefits through their employer.

Each of these models have limitations, particularly for low income earners who do not meet the income thresholds of targeted coverage plans. The universal pharmacare model does not exist in Canada, however, it is widely recognized as providing greater access to prescription medications and has the potential to reduce health inequities for the growing number of Toronto residents living in poverty and experiencing poor health. It also reduces the cost of medications through increased bulk buying.

This report explores how the drug coverage programs in Canada create barriers to accessing prescription drugs for individuals and families who participate in Toronto Public Health programs. These case studies clearly illustrate that the most equitable model is the universal program which provides medications for little or no out-of-pocket cost. Other countries that provide universal drug coverage pay less for medications than Canada and have lower rates of non-adherence due to cost.

The government of Ontario has already taken a step toward extended coverage through OHIP+, which allows for coverage for children and youth who lack private insurance. At the federal level, an advisory council was recently established to provide direction on how best to implement a national pharmacare program. Findings from this report, jointly authored

by Wellesley Institute and Toronto Public Health, support the implementation of a universal single-payer pharmacare program at the federal level, and create a rationale to further extend drug coverage to all residents in the province as an interim measure. Such actions would help to reduce health inequities and improve the health of the whole population through ensuring universal and equitable access to prescription medications.

Introduction

There are significant gaps in drug coverage in Ontario.[1] In 2014, one quarter of Ontarians aged 12 to 64 lacked prescription medication insurance.[2] Women, people with low earnings and newcomers are less likely to have workplace medical benefits and access to prescription medication insurance.[3] This leaves many low-income people paying out-of-pocket for their medications.

In 2015, 24 percent of Ontarians reported that they or a member of their household did not take their medications as prescribed, or missed medications, due to cost.[4] Medication non-adherence leads to poor health outcomes and increased use of other health services.[5] This is especially relevant for low-income people because they have poorer health outcomes than those in higher income groups.[6] The current gaps in drug coverage resulting in differential access to prescription medications in Ontario, and in other provinces, are inconsistent with the principles of universal access, upon which the national health care system is based, and which is valued by many Canadians as one of the top priorities for prescription drug coverage programs.[7]

There is a complex arrangement of prescription drug coverage in Ontario and across Canada. It is widely acknowledged that the existing systems of coverage are inadequate, because they result in gaps in access and affordability, as well as high costs for prescription medications paid by public and private insurers.[8,9] These shortcomings have been identified as important areas for public policy research and analysis by Toronto Public Health and Wellesley Institute, and both organizations have produced papers on the issue.[10,11,12] The Toronto Board of Health and Toronto City Council endorsed the creation of a universal, national pharmacare program in December 2015. Policy discussions taking place nationally about expanding drug coverage, and actions taken within the province of Ontario to extend drug coverage to children and youth without existing private insurance plans are promising steps towards greater prescription drug coverage regionally and at a national level. Nonetheless, significant gaps remain.

A health equity lens can help to assess the drug coverage needs of diverse populations. For low income earners who are at greater risk of poor health, financial and other barriers that prevent access to prescription drugs can worsen health and social inequities. Effective drug coverage policy ensures that every person has coverage and can access necessary medications.[13] Thus, the policy focus of this paper is to make a case for equitable access to prescription medications.

This report describes Ontario's publicly funded prescription drug program models, identifies gaps in coverage and explores other options to expand access to drug coverage. A series of case studies of individuals who participate in Toronto Public Health programs demonstrate how different approaches to prescription drug coverage lower or raise barriers to accessing

medically necessary drugs. Within the complex policy environment of public drug coverage, these scenarios provide a unique public health lens through which to consider how different policy models facilitate or impede health and social equity.

The Broader Policy Context for Prescription Drug Coverage in Ontario

The Changing Labour Market and Growing Inequality

Concerns about the lack of consistent, affordable access to prescription drugs for Ontarians relates to other significant public policy issues, including rising income inequality and the growth in precarious employment. Since the 1980s, and particularly in the last ten years, the proportion of precariously employed workers within the labour market has grown. This trend is marked by a decline in the number of people with job security, in favour of short-term, unstable, and "flexible" work arrangements for many.[14]

Certain social groups disproportionately shoulder the burdens of precarious work, including low-wages, declining autonomy in work, and a lack of benefits tied to employment.[15,16] Research has found that racialized people living in marginalized neighbourhoods in Canada face numerous structural disadvantages within the labour market, which limits their ability to obtain stable employment. There is also evidence of declining social mobility for some immigrants and refugees in Canada, and racialized immigrants who face substantial barriers to finding secure jobs and liveable earnings.[17,18,19]

In the GTA, almost 45 percent of workers between the age of 25 and 65 years were precariously employed in 2015. Fewer than 10 percent of these low-wage workers receive supplemental benefits, such as a drug plan.[20,21] Income-related findings from the 2016 Census show that 20 percent of Toronto residents live on a low income, a higher rate than the rest of the country (14 percent). Of Toronto's employed residents, 35 percent earned an annual income of under $20,000, and 56 percent earned under $40,000.[22] At the same time, Toronto has the lowest housing affordability when compared to all other regions in the province,[23] 46.7 percent of all renter households experience problems with affordability, and one-in-ten households are food insecure.[24]

These social and economic conditions have consequences for health and health equity. In addition to exclusion from health-related benefits, precarious employment negatively impacts health more broadly.[25] Income is a key determinant of health, and there are documented health inequities between high and low-income groups in Ontario. People living in the poorest neighbourhoods have hospitalization rates more than twice that of people living in the richest neighbourhoods for conditions that could be managed outside of hospital settings.[26] Similarly, a 2015 Toronto Public Health report found that men in the

lowest income group are 50 percent more likely to die before age 75, and women in the lowest income group are 85 percent more likely to have diabetes, when compared to the highest income groups.[27] The report concluded that health inequities are worsening over time based on a number of important health status indicators.

There is a need to rethink existing drug coverage programs in Canada, which assume that poor health is equitably distributed among the population, and that residents have drug coverage through employment or are able to purchase their prescription medications. The data described above suggests that this is not true; people with the worst health are often in the lowest income groups, have less access to employer provided benefits and less capacity to pay for their medications. Existing drug coverage programs perpetuate health and social inequities, and deepen disparities such as those based on income, race, immigration status, and gender.

In the following sections, we outline publicly funded drug programs in Ontario, and then discuss the different models of coverage in place throughout Canada. Through case studies of Toronto Public Health program participants, we demonstrate that these models are inadequate for providing comprehensive coverage across different income groups.

Access to Prescription Drugs in Ontario

The **Ontario Drug Benefit (ODB)**[28] is the main entry point into public drug benefits and provides coverage for over 4,400 prescription drug products. Residents of Ontario who hold a valid OHIP card may be eligible for ODB coverage if they are aged 65 or over, live in a long-term care home or home for special care, are enrolled in a home care program or receive social assistance through Ontario Works or the Ontario Disability Support Program. Seniors pay a deductible of $100 and are responsible for co-payments of up to $6.11 per prescription if they exceed an income threshold; after tax, $19,300 for individuals and $32,300 combined income for couples. All other recipients of ODB are exempt from deductibles but may be charged a pharmacist co-payment of $2.00. The **Exceptional Access Program (EAP)** facilitates access to drugs that are not included in the ODB, or where no listed alternative is available. The coverage for EAP medications is determined on a case-by-case basis.

The **Trillium Drug Program** provides catastrophic coverage for Ontarians with high drug costs relative to their income. The program provides coverage for residents who are eligible for provincial health care coverage, do not have private health insurance, and whose prescription drug costs exceed 3-4 percent of their after-tax household income. Recipients must pay a deductible based on their household income. There is also a suite of specialized programs providing coverage for drugs that treat specific conditions.

In January 2018, the provincial government introduced the **OHIP+ Children and Youth Pharmacare** plan for expanded drug coverage to those under the age of 25 years. The plan

covered prescription medications available through the ODB, with no upfront user fees or deductibles.[29] All adults 25 years of age and older maintain coverage through existing public (e.g., Ontario Drug Benefit) and private individual or group insurance plans (e.g., employer sponsored or post-secondary student plans).

In June 2018, the new provincial government announced plans to modify the OHIP+ program to increase efficiencies. The new model will provide free prescriptions to children and youth not already covered by private benefits. Those who are already covered will first charge their private insurers, and the remainder of the costs will be paid by the government. This change means that the province is no longer the first or single payer provider for prescription medications for this group.[30]

Prescription Drug Coverage Models

Canada is the only country with a universal health care system that does not include coverage of prescription drugs. Nationally, a variety of approaches have been developed to address gaps in access that result from the current approach to drug coverage. There are three main models of public drug coverage offered through provincial programs: targeted, insurance-based, and catastrophic drug coverage. This section briefly outlines each model with examples from across Canada, and also discusses a fourth model – universal pharmacare.

Targeted Drug Coverage

Providing specific populations with drug coverage is the model most commonly used by provinces and territories in Canada and ensures access to prescription medications for groups such as seniors, people on social assistance, or people with low income. The Ontario Drug Benefit (ODB) is an example of targeted coverage.

Other provinces in Canada have different targeted coverage than Ontario. The Alberta Adult Health Benefit and the Child Health Benefit provide coverage to households with low income, and other groups may be eligible for public drug coverage, such as people with high drug costs. Saskatchewan provides drug coverage to low-income families with children, while Nova Scotia covers only children living in low-income households. Saskatchewan also provides drug benefits to all children aged 14 and under living in the province. Most targeted drug programs have co-payments and/or deductible costs that vary according to groups receiving coverage. Low-income seniors in Ontario pay no deductible and a copayment of $2 per prescription. By comparison, low-income seniors pay a maximum of $25 per prescription in Saskatchewan. Direct costs through deductibles and co-payments are among the lowest in Ontario compared to other provinces and vary across populations.

Targeted drug coverage can be an effective way to provide prescription medications for eligible groups.[31] All seniors in Ontario are enrolled in the ODB once they turn 65. People

receiving social assistance are also automatically enrolled, which provides relatively quick and simple access to medications. Maintaining low co-payments can ensure the affordability of plans for recipients, and some have suggested that co-payments can act as a modest disincentive to over-prescribing by physicians or overuse of drug benefits in general.[32,33,34]

A major limitation of targeted drug coverage is determining who is eligible and who is excluded. While the ODB provides coverage for people on social assistance, other low-income individuals are required to pay out-of-pocket for prescription medications unless they are covered by employer benefits.[35] There is no guarantee that prescription medications will be covered for social assistance recipients who leave the program after obtaining employment. Thus, targeted coverage can act as a barrier to social and economic mobility for people who are enrolled in social assistance programs.[36]

A second challenge is determining who is required to pay deductibles and co-payments, and the appropriate amount for these charges. Establishing these costs to discourage overuse of the program may create unintended affordability barriers. Most research finds that prescription drug charges lower the use of both essential and non-essential medicines, which can have a negative impact on health.[37] Policy makers must also consider that some populations, such as seniors, are likely to have substantial (and recurring) prescription drug needs, and even modest co-payments can create a financial burden if people have to fill multiple prescriptions.

Insurance-Based Coverage

Optional or mandatory insurance-based coverage provides prescription drug coverage to people who buy into a public insurance program.[38] Insurance-based coverage is used exclusively in Quebec and to a lesser degree in Alberta, New Brunswick and Nova Scotia.

The Quebec program represents a private-public hybrid, in which an employer that offers health benefits must also provide a prescription drug plan. Insurers are required to meet minimum standards that ensure that private insurance does not provide less coverage than that of the public drug insurance plan, and the province sets limits on the cost of deductibles and coinsurance. Some employees pay for coverage through payroll deductions.

Individuals not eligible for insurance through an employer, such as seniors without retirement benefits or people whose employer does not offer health benefits, must register for the provincial Public Prescription Drug Insurance Plan (PPDIP). PPDIP requires that plan members pay premiums, deductibles and co-payments. The annual premium is calculated based on net family income to a maximum of $667. Plan members pay a monthly deductible of $19 and a co-payment of 35 percent of a prescription's cost, minus the deductible, and there is a maximum monthly contribution. The Quebec plan has several exemptions to these

requirements, for example, people receiving social assistance and children are not required to pay these costs.[39]

Alberta offers optional insurance-based coverage through the Non-Group Coverage Benefit. Plan premiums may be reduced for recipients with low income, which is assessed on gross adjusted family income. Plan members must pay co-payments up to a maximum cost of $25, and these cannot be waived. New Brunswick and Nova Scotia also provide insurance-based coverage similar to the Alberta model.

A major challenge of the publicly funded insurance-based coverage is that it can create barriers to access for people with a low income and/or high drug costs, due to premium, co-payment and deductible payments. Everyone in Quebec has coverage, yet the system remains inequitable.[40] Drug prices vary according to public and private plans, and employers and employees pay steep premiums to insurance companies in order to offset the costs of public plans.[41] As well, earnings do not determine premiums for private plans and therefore people with disparate incomes could shoulder the same costs.[42] While Quebec has lower rates of cost-related non-adherence than Canada as a whole (7.2 percent versus 10 percent in 2007; see Table 2), the province has higher rates than comparator countries with universal drug coverage and the other provinces, and limited user fees.[43]

A related challenge is that publicly funded insurance-based plans are intended to serve populations who do not have access to private insurance, and often disproportionately cover populations with high health care and prescription drug needs. Private insurance-based plans can be expensive; ultimately insuring people who are more affluent and who are in relatively better health. By comparison, equitable insurance arrangements pool risk across broad populations, and distribute costs through progressive taxation.[a]

Catastrophic Coverage

The catastrophic coverage model extends prescription drug coverage to eligible individuals and families who shoulder high out-of-pocket costs for prescriptions, often due to chronic illnesses or rare diseases.[44] The premise is that households pay out-of-pocket for their prescription drug costs until they reach a certain percentage of their household income, after which the public system steps in to cover some, or all, of the remaining drug costs for the year. Manitoba, Saskatchewan, Ontario, Prince Edward Island, Newfoundland and Labrador all provide versions of catastrophic coverage alongside other public drug plans.

British Columbia (BC) is the only province that relies exclusively on catastrophic coverage for its public drug plan. All residents who are eligible for provincial health care coverage

a In a progressive tax system groups with lower income pay a lower percentage of their income in tax than do high-income groups. This system is based on the concept of ability to pay.

and who filed a tax return for the relevant tax year are also eligible for the Fair PharmaCare Plan. Deductibles are calculated as a share of family income, and families with a net income of $15,000 or less do not pay a deductible. The plan requires that households pay a family deductible of roughly 2-3 percent of income, after which the public plan covers 70 percent of drug costs. Once the total out-of-pocket expenditure reaches a certain threshold, drugs become fully covered. Each family has a maximum amount paid for prescription drug costs that ranges from $25 to $10,000 depending on income, at which point Fair PharmaCare covers all costs for the rest of the year.[b]

The major benefit of catastrophic coverage is that it is a simple model to administer; everyone is eligible if their drug costs exceed a set percentage of their household income. Governments avoid the challenge of determining eligibility based on more complex factors like population or income, and do not have to establish systems to collect (and exempt people from) premiums, co-payments and deductibles. Catastrophic coverage can provide adequate coverage for middle and upper income households that can afford to pay a portion of their prescription drug costs.

The challenge with catastrophic coverage is that for low-income households even relatively modest prescription drug costs can be unaffordable. This can have substantial effects on non-adherence to prescriptions or can force people to forego essential items to be able to afford medications. Out-of-pocket expenses, paid upfront by people waiting for their benefit enrolment to be processed, can be a financial burden and prevent timely access to necessary medicines. These trade-offs can be unacceptable when household budgets are fixed, and this is particularly the case for people living with chronic disease who are required to pay quarterly annual deductibles.

Among the provinces, BC has the lowest level of public expenditures on prescription drugs in Canada. The province also has the highest number of uninsured and under-insured households at 30 percent (compared to Ontario at 20 percent),[45] and a much higher prevalence of cost-related non-adherence to prescription drug regimens (see Table 2). Ontario avoids this problem to some extent through the Ontario Drug Benefit program, but people not eligible face the same barriers to access as in BC.

Universal Pharmacare

Another model of prescription drug coverage, which has been widely recognized for its health equity benefits, is universal pharmacare. Universal programs provide coverage to all groups

b In February 2018, the BC provincial government announced its plan to invest $105 million in Fair PharmaCare over three years, to reduce or eliminate deductibles for families with incomes between $15,000 and $30,000. The changes are set to begin in January 2019.

within society regardless of employment status, income or other criteria. The ability of a single-payer to purchase drugs centrally by eliminating a patchwork of drug plans, means that governments can maximize their purchasing power and negotiate significantly lower drug prices for bulk purchases.[46]

This model does not currently exist in Canada, but many international jurisdictions provide universal public drug coverage. In England, all citizens have prescription drug coverage within the National Health System (NHS).[c] Citizens face little or no costs for covered medicines, and those who do pay carry low cost co-payments.[47] According to the UK Department of Health, as of 2013, approximately 90 percent of prescription items in England were provided free of charge.[48]

The NHS provides medications at no cost to numerous groups, including people under 16 or over 60 years of age, full-time students aged 16-18, and people receiving social assistance. Some additional groups receive free medications if they have a medical exemption certificate. All other people pay £8.60 per prescription (around CAD$14.25), and there are payment options in place to minimize the burden of these costs.[49]

Recent work on expanded drug coverage in Canada has introduced the possibility of a transitional drug formulary that provides "essential medicines" to all residents, by adapting a World Health Organization list to the Canadian context.[50,51] Cost benefit analysis of this type of program estimates that incremental costs to government would be $1.2 billion per year to provide coverage for approximately 125 essential medicines, and would save individuals and private providers $4.3 billion annually. The list is comprised of roughly 90 percent of prescription drugs, or therapeutically comparable medications, prescribed in primary care in Ontario. The effectiveness of full coverage of essential medicines for improved health and other outcomes (adherence, appropriate prescribing, and costs) is currently being tested in a randomized control trial in Ontario.[52]

In 2014, Canada had one of the highest drug expenditures of all Organisation for Economic Co-operation and Development (OECD) nations.[53] In 2015, generic essential medicines in Sweden and New Zealand were 60 percent and 84 percent less in cost, respectively, than in Canada. Under the various coverage models described here, the drug purchasing system in Canada is highly fragmented, and this is one of the reasons that costs are high relative to other countries.[d] Table 2 provides per capita prescription drug expenditures for provinces

c The National Health System covers other jurisdictions in the United Kingdom, including Scotland, Wales and Northern Ireland, each of which have different charging structures for prescription medications. For example, Wales abolished prescription drug charges via copayments or deductibles in 2007.

d In January 2016, the federal government joined the provinces in the pan-Canadian Pharmaceutical Alliance (pCPA) to promote bulk purchasing. The annual savings due to this partnership is estimated to be more than $490 million. The consolidation of drug purchasing through a universal single payer would further facilitate equitable prices for prescription drugs relative to other countries with similar economic profiles.

in Canada and several countries with universal drug coverage models. It demonstrates very low non-adherence rates for the United Kingdom, at 2 percent, versus 10 percent in Canada. As these figures demonstrate, the NHS model is the least expensive while also providing the most equitable coverage.

The main arguments against universal pharmacare focus on increased costs to governments and individuals once the responsibility for private and employer drug plan costs are transitioned to the government. There are, however, reasonable methods to generate revenue for a universal pharmacare system. This could be achieved through a progressive taxation system in which contribution through taxes is based on percentage of income, or through increases to corporate tax contributions to account for the considerable savings to the private sector. It has been identified that there would be negative economic consequences for private insurance companies and the pharmaceutical industry if universal pharmacare were introduced.[54]

Critics also argue that under a universal system access to new and innovative medicines would be limited, and that some Canadians who currently receive private insurance would be forced to accept narrower coverage due to a restrictive public drug formulary. Other countries with universal systems have implemented rigorous, evidence-based processes to determine which medicines are included for coverage. Examples of cost-effective, context-driven, evidence-based formularies include Sweden's list of approximately 200 medications, as well as the United Kingdom's regional short lists.[55]

Applying Models of Coverage to Public Health Program Participants

The models of prescription drug coverage described vary considerably, and this can mean differences in the level of coverage that individuals receive. To demonstrate, this section applies drug coverage models to five individuals and families participating in public health programs in Toronto.

All health units in the province are mandated, through the Ministry of Health and Long-Term Care's Standards for Ontario Public Health Programs and Services, to improve population health and reduce health inequities. Toronto Public Health fulfills this function in a number of different ways, including through the provision of culturally competent and accessible services to meet the needs of diverse groups. While Toronto Public Health's focus is on the entire population, its services and programs prioritize people with the least access to resources, and often the greatest health needs. Many of these groups lack access to prescription drug coverage.

The following case studies include:[e,f]

Alia, a 27-year-old lone parent with post-partum depression, who participated in the Healthy Babies Healthy Children (HBHC) program;

Zane, a 51-year-old custodian with Type 2 diabetes who participated in a Smoking Cessation/ Nicotine Replacement Therapy Program;

Tyrone and Talisha, aged 5 and 6, who were both diagnosed with asthma after their parents completed a Peer Nutrition workshop;

Elaine, a 27-year-old barista and line chef with rheumatoid arthritis who visited the Sexual Health Clinic;

Leila and Nadia, aged 38, a high-income couple who accessed a Breastfeeding Clinic after having a baby.

After calculating monthly drug costs as a proportion of income and essential living expenses (rent and food), costs are compared across the different models of coverage described above. These estimates are in the high range for Ontario as a whole, given Toronto's relatively expensive rental rates.

1) New Mother accessing the Healthy Babies Healthy Children (HBHC) program:

Alia is 27-years-old and just gave birth to her first child, who is 4 weeks old. Alia is single and receives a total take home monthly income of $1,790. Alia finds it hard to make ends meet and her food budget is particularly tight. Alia was eligible for the HBHC program, which is a home-visiting program that supports individuals, and families to maintain healthy pregnancies, develop positive relationships with their child, and promote healthy child development. At a home visit, the Public Health Nurse noticed that Alia appeared to be feeling down, and she admitted to having low energy, decreased appetite, and feelings of inadequacy as a mother. The Public Health Nurse provided support and information about coping strategies and referred her to her family doctor for follow-up.

Alia's family physician diagnosed her with postpartum depression and recommended that she start on Sertraline, an antidepressant. A monthly supply of the medicine costs $26.48 along with a dispensing fee of $11.49. These costs would account for 12.5 percent of her discretionary income after rent and food. Alia has coverage via the Ontario Drug Benefit because she is on Ontario Works and pays a monthly $2 dispensing fee for her medicine.

---

e These case studies are hypothetical and do not represent specific people. While they are written to reflect the characteristics of people who access Toronto Public Health programs, they do not claim to be representative of this highly diverse population.

f See **Appendix** (Case Study Methodology) for details about specific calculations in the case studies.

Take home monthly income: $1,790

- $986 from Ontario Works
- $115 from Ontario Child Benefit
- $59 in GST/HST credits
- $97 from the Ontario Trillium Benefit
- $533 from the Canada Child Benefit

Monthly income after rent and food: $303

Expected monthly household drug expenditure without drug coverage: $38

Expected drug expenditure as a proportion of discretionary (after rent & food) income: 12.5%

Actual monthly household drug expenditure: $2

Actual drug expenditure as a proportion of discretionary (after rent & food) income: 0.66%

2) Adult Male accessing the Smoking Cessation/Nicotine Replacement Therapy program:

Zane is a 51-year-old custodian at a large law firm in downtown Toronto. He currently works part time for 25 hours each week, where he earns minimum wage. In order to make ends meet, he works another part-time job as a security guard a few evenings a week, working 10 hours per week. After income taxes, CPP, and EI deductions Zane takes home $1,880.76 per month. As he is a part-time worker, neither job offers health insurance.

Zane has been trying to quit smoking for many years, but despite his efforts, he continues to have difficulty stopping for more than a few days at a time. One of his co-workers mentioned a smoking cessation and Nicotine Replacement Therapy (NRT) program. Stop on the Road is a three-hour workshop, delivered in partnership with the Centre for Addiction and Mental Health, which provides a group psychoeducation presentation and free NRT. During the workshop, Zane was encouraged by a Public Health Nurse to see a physician for the first time in many years.

At a doctor's visit, he was found to have Type 2 diabetes. In addition to recommending lifestyle modifications, Zane's physician also suggested that he start on Metformin, Gliclazide and Sitagliptin for the treatment of his diabetes. When he went to the pharmacy, he was told that per month the medicine would cost $18.61 for the Metformin, $20.50 for the Gliclazide and $119.30 for the Sitagliptin, in addition to the dispensing fee for all three medications. Without insurance, the cost of this medication accounts for one-third of his discretionary income after rent and food. Zane is worried about the complications from diabetes, but simply cannot afford these medications.

Take home monthly income: $1,880.76

- $1,776.76 in earnings after deductions
- $36 in GST/HST credits
- $68 from the Ontario Trillium Benefit

Monthly income after rent and food: $583.17

Monthly household drug expenditure: $192.88

Drug expenditure as a proportion of discretionary (after rent & food) income: 33%

3) Family of five accessing the Peer Nutrition program:[g]

Tyrone and Talisha, aged five and six, live with their parents and their infant sibling. The children's father works full-time (37.5 hours per week) at a food store where he earns $14 per hour but does not receive any private health insurance. Their mother stays home to care for them. The family's total monthly take home income is $4,019.

The parents were interested in learning how to make nutritious baby food at home. Friends who had attended the Peer Nutrition program recommended the educational program, which is provided in collaboration with community partners. The program provides culturally specific workshops that focus on improving food selection and food skills for parents and caregivers. During the program, the parents told public health staff that two of their children were wheezing and that they were planning to take them to see their doctor.

Both Tyrone and Talisha were diagnosed with asthma, a condition that runs in their family. The doctor recommended that both children have a rescue inhaler – Salbutamol – as well as a controller inhaler – Fluticasone. Salbutamol costs $19 per inhaler while Fluticasone costs $110 per inhaler, in addition to dispensing fees. Paying for the Fluticasone, in particular, would put a financial strain on the family. By purchasing these medications for both children, the family spends close to 20 percent of their discretionary income after rent and food. The physician emphasized the importance of taking the Fluticasone every day to control the asthma but given its cost the parents wonder if using only the Salbutamol is sufficient, as they would like to spend some money on extracurricular activities for the children.

Take home monthly income: $4,019

- $1,890.05 in earnings after deductions
- $334 from the Ontario Child Benefit
- $83 in GST/HST credits
- $179 from the Ontario Trillium Benefit
- $1,517 from the Canada Child Benefit

g The Peer Nutrition program was integrated into Toronto Public Health's Early Years services in early 2018 and no longer exists as a stand-alone program.

- $16 in Working Income Tax Benefit payments

Monthly income after rent and food: $1,618

Monthly household drug expenditure (for both children): $304

Drug expenditure as a proportion of discretionary (after rent & food) income: 19%

4) Young Adult accessing a Sexual Health Clinic:

Elaine is a 27-year-old who works as a line chef at a Toronto restaurant and a barista at a coffee shop. She is unable to find full-time employment and so works part time at both. At the restaurant, she works 15 hours a week and is paid $15 per hour. At the coffee shop, she works 25 hours a week and is paid $14 per hour. After incomes taxes, CPP, and EI deductions Elaine takes home $2,147 per month. She receives no health benefits from either job.

Elaine recently visited a Sexual Health Clinic which provides a range of sexual health services (e.g., birth control counselling and STI testing and treatment). At the visit, she complained of joint swelling and pain. After being referred to a specialist, she was diagnosed with rheumatoid arthritis. The specialist recommended triple therapy with methotrexate ($278.20), plaquenil ($14.70), and sulfasalazine ($38.60). The combined cost of these drugs is $331.50 per month plus dispensing fees, which accounts for over 40 percent of her discretionary income. Elaine is very worried about these drug costs but knows that if she does not take them she may not be able to work.

Take home monthly income: $2,147

- $2,051.83 in earnings after deductions
- $36 in GST/HST credits
- $59 from the Ontario Trillium Benefit.

Monthly income after rent and food: $880

Monthly household drug expenditure: $366

Drug expenditure as a proportion of discretionary (after rent & food) income: 42%

5) New mother accessing a Breastfeeding Clinic:

Leila and Nadia are a professional couple with a combined annual income of $300,000. As a lawyer and university professor, they both have employee health care benefits, which includes a drug coverage plan. Recently, the couple decided to expand their family by having a child. While pregnant, Leila developed gestational diabetes mellitus (GDM) and was required to take insulin for most of her pregnancy.

After researching the topic, Leila discovered that there is growing evidence that there are short- and long-term health benefits associated with breastfeeding for mothers with GDM. After giving birth, she experienced a lot of difficulty breastfeeding, and visited a Toronto Public Health breastfeeding clinic to seek support around effective techniques. Leila discussed her experience with GDM with the Public Health Nurse and was encouraged to follow-up with her family physician to screen for diabetes.

About a year after her pregnancy, Leila developed diabetes. Eventually, she was placed on the same regime that Zane's physician prescribed; Metformin, Gliclazide and Sitagliptin. The combined total monthly cost for these drugs is $192.88. With private employer medical plans and an annual combined income of $300,000, the monthly costs for these prescriptions are negligible.

Take home monthly income: $15,663 (earnings after deductions)

Monthly income after food and housing costs (mortgage, property taxes, utilities, and home maintenance): $8,411

Monthly household drug expenditure: $192.88

Drug expenditure as a proportion of discretionary (after food and housing) income: 2.3%

Table 1. Applying Prescription Drug Coverage Models to Toronto Public Health Program Participants[h]

The following table summarizes the differential impacts of five public and one employer provided drug programs on the five individuals described above.

	Targeted (Ontario Drug Benefit)	Insurance-Based (Quebec PPDIP)	Catastrophic (BC Fair PharmaCare)	OHIP+: Ontario and Youth Pharmacare (coverage for <25)	Employer Provided Drug Benefits	Universal (NHS England)
Alia, 27, lone parent Monthly cost of drugs: $38.	Eligible for ODB coverage as a social assistance recipient. Alia must pay a co-payment of $2 per prescription. Total monthly expenditure: $2.	Eligible for PPDIP as social assistance recipient. Premiums, deductibles and co-payments waived. Total monthly expenditure: $0.	Eligible for Fair PharmaCare coverage. Alia pays 30% of her drug costs up to $250, her annual family maximum. Total monthly expenditure: $11.39.	Not eligible due to age.	Not eligible due to employment status.	Eligible for NHS coverage with no co-payments as Alia has given birth within the last 12 months. Total monthly expenditure: $0.
Zane, 51, custodian Monthly cost of drugs: $192.88.	Not eligible for ODB coverage.	Eligible for PPDIP coverage. Zane's annual premium is $399 and he must pay a monthly deductible of $19.45 plus a co-payment of $60.35 (calculated as 34.8% of his drug costs minus the deductible). Annual premium: $399 (paid regardless of whether Zane fills any prescriptions). Total monthly expenditure: $79.8 (deductible = $19.45, co-payment = $60.35).	Eligible for Fair PharmaCare coverage. Zane pays 100% of his drug costs up to $450, which is his deductible. After this has been reached he pays 30% of drug costs up to his annual maximum of $225. (Total: $675) Total monthly expenditure varies by month. Zane pays the full $192.88 for his drugs in month 1-3 until he reaches his $450 deductible. He then pays approximately $58 in months 3-7 until he reaches his annual maximum. In months 8-12 Zane pays $0. Avg. monthly costs: $56.25.	Not eligible due to age.	Not provided.	Eligible for NHS coverage with no co-payments as Zane's qualifies for a medical exemption certificate due to his diabetes. Total monthly expenditure: $0.
Tyrone and Talisha, 5 & 6 Monthly cost of drugs: $304.	Not eligible for ODB coverage.	Eligible for PPDIP coverage. The family's annual premium is $0 due to their income. They do not pay any deductible or co-payment as Tyrone and Talisha are under 18 years old. Annual premium: $0. Total monthly expenditure: $0.	Eligible for Fair PharmaCare coverage. The family is required to pay $450 family deductible. After this is reached the family pay a 30% co-payment. Once the family has spent $675 out-of-pocket on drug expenses the Fair PharmaCare coverage increases to 100%. Total monthly expenditure varies by month. The family pays the full $304 in month 1 and part of the cost in month 2 until their deductible is reached. They then pay 30% from months 2-4 until they reach their maximum annual out-of-pocket costs of $675. Avg. monthly costs: $56.25.	Both puffers that the children require are covered by the most recent version because the family does not have a private plan. Total monthly expenditure: $0.	Not provided.	Eligible for NHS coverage with no co-payments as both of Tyrone and Talisha are aged under 16 years old. Total monthly expenditure: $0.
Elaine, 27-year old cook and barista Monthly cost of drugs: $366.	Not eligible for ODB coverage.	Eligible for PPDIP coverage. Elaine's annual premium is $667 and she must pay the maximum monthly contribution (deductible and co-payment) of $89. Annual premium: $667 (paid regardless of whether Elaine fills any prescriptions). Total monthly expenditure: $89 (maximum monthly limit).	Eligible for Fair PharmaCare coverage. Elaine must pay 100% of her drug costs up to $500, which is her deductible. After this has been reached Elaine pays 30% of drug costs up to her annual maximum of $750. Total monthly expenditure varies by month. Elaine pays the full $366 in month 1 and varying amounts in months 2-4 after which she reaches her maximum annual out-of-pocket costs is $750, all paid in the first few months of the year. Avg. monthly costs: $62.50.	Not eligible due to age.	Not provided.	Elaine pays only £2 (around $3.50 CAD) per prescription and can purchase a 12-month prescription pre-payment certificate for £104 ($182 CAD). Assuming she obtains 3 months of medications at a time, her monthly payment is £10.67 ($18.68 CAD). Total monthly expenditure: $19.
Leila and Nadia, 38, lawyer and professor Monthly cost of drugs: $192.88.	Not eligible for ODB coverage.	Covered by private plan that pays 100% of drug costs. Total monthly expenditure: $0.	Covered by private plan that pays 100% of drug costs. Total monthly expenditure: $0.	Not eligible due to age.	Covered by private plan that pays 100% of drug costs. Total monthly expenditure: $0.	Eligible for NHS coverage with no co-payments as Leila has given birth within the last 12 months. Total monthly expenditure: $0.

h Specific drug programs for each model have been selected to demonstrate how coverage varies: targeted uses the Ontario Drug Benefit, insurance-based uses Quebec's PPDIP, catastrophic uses British Columbia's Fair PharmaCare plan and universal coverage uses NHS England.

How Models of Coverage Create or Mitigate Inequities in Access

These case studies demonstrate the variation in prescription drug coverage provided in Canada and how type of coverage impacts affordability, compared to universal pharmacare provided by NHS England.

Under the targeted model, most of the illustrative case studies do not receive coverage. As a social assistance recipient, Alia has the most complete and affordable coverage. For Zane and Elaine, prescription drug payments account for between 33 and 42 percent of their income, after paying for rent and food. Tyrone and Talisha's parents have to spend almost 20 percent of their discretionary income to pay for their children's medicines. This model is reflective of how most Canadian public drug plans operate; some vulnerable populations are eligible for coverage, while other populations, such as the working poor, are excluded.

Under the insurance-based model, Zane and Elaine are required to pay premiums as well as monthly deductibles and co-payments. Tyrone and Talisha's family would pay no annual premium under the insurance-based model, and there is no deductible or copayment because the children are under 18 years old. As a social assistance recipient, Alia would similarly have no costs associated with this coverage.

The catastrophic model of coverage requires variable out-of-pocket payment each month depending on where people are in their deductible, co-payment and annual maximum cycles. Monthly drug expenses that start very high and then slowly drop to $0 over a year may make budgeting difficult for low wage workers. Both the catastrophic and insurance models can present substantial barriers to access as even relatively modest out-of-pocket costs can be financially overwhelming for people with low incomes.

The OHIP+ program in Ontario works better for Tyrone and Talisha's family who receive full coverage because the children are younger than 25. As low-wage workers over 25, Zane and Elaine continue to pay for their medications out-of-pocket. The province's Trillium Drug Program would provide some catastrophic coverage once they spent more than four percent of their income on prescription drugs, but this is still a significant financial expenditure for some people.

Leila and Nadia, a high-income family, pay nothing or very little due to their work health benefit plans, which provide coverage in place of, or in addition, to the public models. For the same diabetes medications, costs account for 2.3 percent of their household income compared with 33 percent for Zane. Regardless, Zane still pays out-of-pocket under each of the Canadian models, which could deter him from taking medicines needed to manage his diabetes.

The Canadian models of drug coverage offer a clear contrast to the universal system used by the NHS England, which covers all residents with modest co-payments, and ensures that populations that need it have access to prescription drugs at no cost. Each of the illustrative case studies qualify for either low or no cost prescriptions under the NHS England model. Elaine must pay $19 out-of-pocket per month for her monthly drug costs, which accounts for only 2 percent of her household expenditures, compared to the 16-42 percent that she would pay under the other models. The universal model recognizes that while most people will need prescription drugs at some point in their lives, not everyone is able to pay out-of-pocket and some people's health needs are so great that the most equitable solution is to provide prescription drugs at no cost.

Ensuring Equity in Prescription Drug Coverage

An examination of alternative models provides useful lessons about who benefits, and who is excluded, in different approaches to public drug coverage. It is important that all Ontarians have equitable access to medically necessary medications. The targeted, insurance-based and catastrophic models currently in use across Canada all provide adequate coverage to some populations but exclude others who must pay a disproportionally large share of their income for out-of-pocket prescription drug expenses. Under such conditions, people are forced to choose between paying for prescription medications versus food. There are implications for health equity when high income earners pay small amounts relative to income, compared with low income earners who are often without benefits.

Ontario currently provides among the most comprehensive prescription drug coverage in Canada, with its mix of the Ontario Drug Benefit and Trillium Drug Plan. Despite this, one in nine Ontarians do not use a prescription medication as directed each year because of cost.[5,6] This indicates that the current model of coverage does not adequately protect Ontarians from facing high out-of-pocket drug costs. Achieving access to pharmaceuticals to treat health problems and maintain health should not be dependent on employment status or income.

The step towards universal drug coverage for all Ontarians under 25 years of age was a critical first move toward achieving an equitable pharmacare program. The expansion of ODB-level coverage to a wider population marked an incremental approach to drug reform and opened a policy window to introduce a more universal program at the provincial and federal levels.[i] While this move expanded drug coverage to many younger people whose families experience barriers to access, there remains a significant number of low-income Canadians who are under- or uninsured.

i The recent changes to OHIP+ in June 2018 represent a narrowing of this window to some degree at the provincial level and indicate that there will be a continued gap in coverage for those groups that currently receive targeted drug coverage (e.g., seniors) but would benefit from a universal model without copayments or deductibles.

This report describes the economic impacts of public drug coverage plans for Toronto Public Health program participants. Toronto has the highest poverty rate across large municipalities in Canada, and income inequality in the city is rising twice as fast as the rest of the country.[57,58] Health outcomes vary according to income level, and people who are living in poverty or with low-incomes tend to have the worst health. Research also documents growing evidence that precarious work is detrimental to both physical and mental health.[59]

The lack of drug coverage for many Torontonians will further perpetuate inequities between those who are struggling to make ends meet and high-income earners. Under existing coverage systems, those in the top and lowest (i.e., those enrolled in social assistance programs) income groups maintain coverage through public and private drug programs. For those who are precariously employed and having difficulty covering the costs of essential items, the lack of drug coverage can increase economic vulnerability and further compromise health status. From a population health perspective, cost-related non-adherence or opting to pay for medications at the expense of other necessities, exacerbates inequities. The universal provision of drug benefits can help to prevent and mitigate these effects.

The impact of labour market conditions on the provision of social and health benefits attached to employment could have been addressed through a number of recent policy developments in Ontario. The *Changing Workplaces Review* sought recommendations to tackle broad workplace issues and assess how existing labour and employment law addresses current trends, such as "changes in the prevalence and characteristics of standard employment relationships."[60] The final report acknowledged the detrimental health impacts of a lack of access to drug benefit plans, and that an employer-provided benefit system creates disparity in coverage amongst Ontarians. Despite these admissions, the review did not recommend that the provincial government require employers to provide equal benefits to part-time, temporary, casual or seasonal employees, for practical and other reasons (e.g., financial burden to small businesses).[61] Ensuing legislation also neglected the needs of the many low wage employees who lack health and drug coverage.[62]

The *Commission for the Review of Social Assistance in Ontario* (CRSAO) (2012)[63] similarly recommended extended health benefits for all low-income Ontarians not receiving social assistance. The review recognized that prescription drug coverage is often unavailable through low wage employment, and people who exit social assistance may lose benefits to take up work in non-standard or low-wage jobs, which acts as a disincentive for workforce integration.[64] The CRSAO identified several potential pathways towards extended health benefits for people with low incomes through employer, government or private sector provided insurance plans.

The Ontario *Income Security Reform Working Group*[65] also recommended extending essential health benefits to all low-income adults, as more than half of people living in poverty in 2015 (1.94 million people) did not receive social assistance and were, thus, unable to access drug

benefits. While these policy initiatives to improve income security in Ontario have been promising, they have fallen short of extending universal drug coverage across the population.

There is an important caution in establishing an income-based program. As seen in BC, abandoning targeted coverage for a purely income-based catastrophic coverage model can leave many people with poor access to the public program, as high deductibles and co-payments create a significant barrier for people with low income.[j] BC has the highest rate of cost-related non-adherence to prescription medication in Canada,[66] and research has found that policies that establish costs to users have lasting effects in terms of limiting access to medicine.[67]

The most equitable drug coverage model, and least expensive from a societal perspective, is universal pharmacare. There has long been widespread support for universal drug coverage in Canada, including from provincial governments, health policy researchers, health care organizations, organized labour, professional associations, and municipalities.[k] In April 2018, the Standing Committee on Health released a report, *Pharmacare Now: Prescription Medicine Coverage for all Canadians*, which recommends that the federal government establish a universal single payer public prescription drug coverage program. The report cites findings from the Parliamentary Budget Officer that estimates that a universal pharmacare program would lead to savings of roughly $4.2 billion on total drug spending for Canadians.[68] An Advisory Council on the Implementation of National Pharmacare has also been established to provide independent advice to the Health and Finance Ministers on how to best implement an affordable national program.

In the meantime, Wellesley Institute and Toronto Public Health encourage Ontario to consider developing an interim made-in-Ontario model by expanding drug coverage to people in all age groups, income groups and employment situations. This action would represent a crucial step towards promoting health and social equity. Finally, we urge the federal government to establish a national universal single-payer pharmacare program to ensure a minimum standard of access for prescription medications.

j These problems have recently been acknowledged by the BC government when they announced they would eliminate or reduce out-of-pocket payments for many low-income earners as of January 2019. The province is now urging the federal government to invest in a national pharmacare program to ensure that all people who need prescription drugs can access them.

k In addition to numerous endorsements by academic experts and community, professional and labour organizations, a 2015 Angus Reid Institute survey found that 91% of Canadians support the idea of a national pharmacare program that would provide free universal access to prescription drugs.

Table 2. Comparison of Canadian provinces and countries with Universal, Public Drug Programs[l,m,n,o,p]

Province/ Country	Number of Plans	Models Represented in Plans	Non-adherence – adults not taking medicines because of cost, 2007 and 2016 (share of population)	Per capita prescription drug expenditures ($CAD) 2015 (or closest year)
Alberta	10	Targeted, Insurance-Based, Disease/ Condition-Specific	7.6%	728.10
British Columbia	10	Catastrophic, Targeted, Disease/ Condition-Specific	17%	590.68
Saskatchewan	11	Targeted, Catastrophic, Disease/ Condition-Specific	---	746.83
Manitoba	5	Catastrophic, Targeted, Disease/ Condition-Specific	---	702.08
Saskatchewan and Manitoba	---	---	8.9%	---
Ontario*	7	Targeted, Catastrophic Disease/ Condition-Specific,	9.1%	828.37
Quebec	1	Insurance-Based	7.2%	970.18
Atlantic Provinces	---	---	11.9%	---
Newfoundland and Labrador	5	Catastrophic, Targeted, Disease/ Condition-Specific	---	858.10
Nova Scotia	5	Targeted, Insurance-Based, Disease/ Condition-Specific	---	920.37
New Brunswick	10	Insurance-Based, Targeted, Disease/ Condition Specific	---	879.02
Prince Edward Island	27	Catastrophic, Targeted, Disease/ Condition-Specific	---	694.03
Canada	--	Patchwork of Different Plans	10%	952.1
United Kingdom	--	Universal, Public	2%	598.3
Norway	--	Universal, Public	3.5%	563.9
Sweden	--	Universal, Public	5.8%	602.5

l Source for provincial per capita expenditure figures and number of plans figures: Clement, F.M., Soril, L.J.J., Emery, H., Campbell, D.J.T., & Manns, B.J. (2016). Canadian Publicly Funded Prescription Drug Plans, Expenditures and an Overview of Patient Impacts. Calgary: Alberta Health. Retrieved from: http://www.health.alberta.ca/documents/Health-Spending-PubliclyFundedDrugPlans-2016.pdf

m Source for national per capita expenditure: Canadian Institute for Health Information. (2016). *Prescribed Drug Spending in Canada, 2016: A Focus on Public Drug Programs – international comparisons chart*. Retrieved from: https://secure.cihi.ca/estore/productFamily.htm?locale=en&pf=PFC3333&lang=en

n Source for provincial non-adherence prevalence rates (2007 CCHS): Law, M.R., Cheng, L., Dhalla, I.A., Heard, D., & Morgan, S.G. (2012). The effect of cost on adherence to prescription medications in Canada. CMAJ. 184(3): 297-302.

o Source for national non-adherence rates (2016): Morgan, E. (2017). A Prescription for Failure. Presentation at the *Canadian Health Coalition Policy Conference on "A Prescription for Equity."* Retrieved from: http://www.healthcoalition.ca/wp-content/uploads/2017/04/Morgan-E.pdf

p *Ontario will also provide universal coverage with no premiums, co-payments or deductibles for everyone 24 years of age and under as of January 2018

Table Limitations:

The findings in this table are taken from a variety of references and data sources and may represent differences in terms of data source and dates, as well as design and methodological differences. The fact that we did not systematically assess potential differences across these sources should be acknowledged when comparing numbers within columns that come from different sources (e.g., national versus provincial non-adherence rates). We feel that there is value in being able to compare these compiled numbers despite these limitations.

Appendix – Case Study Methodology

The case studies are based on the socioeconomic characteristics of people participating in Toronto Public Health programs. The **financial figures** were calculated based on the following sources and assumptions outlined below. The income, deduction, and benefit figures are estimated for households in Ontario for the most recent data available.

- Benefits were estimated for 2017 levels using the Canada Revenue Agency's "Child and Family Benefits Calculator" available at: https://www.canada.ca/en/revenue-agency/services/child-family-benefits/child-family-benefits-calculator.html and the most recent Ontario Works rates from the City of Toronto available at: https://www.toronto.ca/wp-content/uploads/2017/11/99bb-ontario-works-rate-chart-oct2017-tess.pdf.
- Ontario Works calculations combines the basic needs and the maximum shelter benefit amounts.
- GST/HST credits are paid quarterly but were averaged over the months of the year. WITB payment is annual but was also averaged over the months of the year.
- Payroll deductions including taxes, Canada Pension Plan, and Employment Insurance deductions were estimated for 2018 using the Canada Revenue Agency's "Payroll Deductions Online Calculator" available at: https://www.canada.ca/en/revenue-agency/services/e-services/e-services-businesses/payroll-deductions-online-calculator.html
- Wages were estimated based on existing minimum wages in Ontario at the time of publication. The provincial government increased the minimum wage in 2018 to $14. It plans to increase the minimum wage to $15 in 2019.
- Gross employment income was estimated based on 4.33 weeks per month

For the **'discretionary income'** figure, food and housing costs were subtracted from the take-home after tax and transfer income for each case.

- Food costs were estimated using Toronto Public Health's 2018 "Nutritious Food Basket" calculator, which considers family size, age, and sex. It is available at: https://www1.toronto.ca/wps/portal/contentonly?vgnextoid=5bc0ce7e2b322410VgnVCM10000071d60f89RCRD
- Rent costs were estimated to be mean rents in the City of Toronto for October 2017 based on Canada Mortgage and Housing Corporation's Housing Information Portal: CMHC Rental Market Survey zones 1-17 which align with the City of Toronto. This calculation takes into account family size and the appropriate number of required bedrooms according to the National Occupancy Standard requirements (i.e. not overcrowded). These are available at: https://www03.cmhc-schl.gc.ca/hmiportal/en/#TableMapChart/3520005/4/Toronto%20©

Drug cost estimates include cost of medications and dispensing fees. These were provided by local pharmacies (Shoppers Drug Mart and Rexall) in Toronto. Dispensing fees vary somewhat by pharmacy. This report uses an average of $11.49 for dispensing costs based on quotes from two pharmacies with relatively high ($12.99) and low ($9.99) rates. Case studies reflect the fact that dispensing fees are typically charged per prescription.

Drug plan coverage was estimated using the official government websites for each program.

- For Quebec's Public Prescription Drug Insurance Plan (PPDIP) eligibility, annual premiums, deductibles, copays, and max contribution limits were estimated using Régie de l'assurance maladie du Québec's questionnaire for 2017 available at: http://www.ramq.gouv.qc.ca/en/citizens/prescription-drug-insurance/check-your-situation/Pages/introduction.aspx and Schedule K from Revenue Quebec at: http://www.revenuquebec.ca/documents/en/formulaires/tp/2017-12/TP-1.D.K-V(2017-12).pdf
- British Columbia 'Fair Pharmacare' 2018 annual deductibles, client pay portions, and annual family maximums estimated using BC Health's "Fair PharmaCare Calculator" available at: https://www.health.gov.bc.ca/pharmacare/plani/calculator/calculator.html

Details of case study calculations can be provided by Scott Leon at scott@wellesleyinstitute.com.

References

1 Barnes, S., & Anderson, L. (2015). Low Earnings, Unfilled Prescriptions: Employer-Provided Health Benefit Coverage in Canada. Toronto: Wellesley Institute. Retrieved from: http://www.wellesleyinstitute.com/wp-content/uploads/2015/07/Low-Earnings-Unfilled-Prescriptions-2015.pdf

2 Health Quality Ontario. (2016). Measuring Up 2016: A yearly report on how Ontario's health system is performing. Toronto: Queen's Printer for Ontario. Retrieved from: http://www.hqontario.ca/portals/0/Documents/pr/measuring-up-2016-en.pdf

3 Barnes, S., & Anderson, L. (2015). Low Earnings, Unfilled Prescriptions.

4 Angus Reid Institute. (2015). Prescription drug access and affordability an issue for nearly a quarter of all Canadian households. Retrieved from: http://angusreid.org/wp-content/uploads/2015/07/2015.07.09-Pharma.pdf

5 Morgan, S.G. & Lee, A. (2017). Cost-related non-adherence to prescribed medicines among older adults: a cross-sectional analysis of a survey in 11 developed countries. BMJ Open. 7(1): e014287.

6 Health Quality Ontario. (2016). Income and Health: Opportunities to achieve health equity in Ontario. Toronto: Queen's Printer Ontario. Retrieved from: http://www.hqontario.ca/Portals/0/documents/system-performance/health-equity-report-en.pdf

7 Citizens' Reference Panel on Pharmacare in Canada. (2016) Necessary Medicines: Recommendations of the Citizens' Reference Panel on Pharmacare in Canada. Vancouver: Pharmaceutical Policy Research Collaboration, University of British Columbia.

8 Daw, J. & Morgan, S.G. (2012). Stitching the gaps in the Canadian public drug coverage patchwork? A review of provincial pharmacare policy changes from 2000 to 2010. Health Policy. 104(1): 19-26.

9 Morgan, S.G., Law, M., Daw, J.R., Abraham, L. & Martin, D. (2015). Estimated cost of universal public coverage of prescription drugs in Canada. CMAJ. 187(7): 491-97.

10 Toronto Public Health. (2015). Pharmacare - Improving Access to Prescription Medications. Staff Report for the Board of Health. Retrieved from: https://www.toronto.ca/legdocs/mmis/2015/hl/bgrd/backgroundfile-85830.pdf

11 Barnes, S., & Anderson, L. (2015). Low Earnings, Unfilled Prescriptions.

12 Barnes, S., Abban, V., & Weiss, A. (2015). Low Wages, No Benefits: Expanding Access To Health Benefits For Low Income Ontarians. Wellesley Institute.

13 Morgan, S., Martin, D., Gagnon, M-A., Mintzes, B., Daw, J., & Lexchin, J. (2015). Pharmacare 2020: The Future of Drug Coverage in Canada. Vancouver: The Pharmaceutical Policy Research Collaboration. Retrieved from: http://pharmacare2020.ca/assets/pdf/The_Future_of_Drug_Coverage_in_Canada.pdf

14 Poverty and Employment Precarity in Southern Ontario. (2015). The Precarity Penalty: The impact of employment precarity on individuals, households and communities –and what to do about it. Toronto: United Way Toronto, McMaster University and Social Sciences and Humanities Research Council. Retrieved from: https://pepsouwt.files.wordpress.com/2015/05/precarity-penalty-summary_final-hires_trimmed.pdf

15 Access Alliance. (2011). Research Bulletin #1. Labour Market Challenges and Discrimination faced by Racialized Groups in the Black Creek Area. Toronto: Access Alliance. Retrieved from: http://accessalliance.ca/wp-content/uploads/2015/03/ISRH-Research-Bulletin-1-Labour-Market-Barriers-faced-by-Racialized-Groups.pdf

16 Lewchuk, W., Laflèche, M., Procyk, S., Cook, C., Dyson, D., Goldring, L., Lior, K., Meisner, A., Shields, J., Tambureno, A., & Viducis, P. (2016). The Precarity Penalty: How Insecure Employment Disadvantages Workers and Their Families. alternate routes: a journal of critical social research. 27: 87-108.

17 Block, S., & Galabuz, G-E. (2011). Canada's Colour Coded Labour Market: The gap for racialized workers. Toronto: Wellesley Institute and Canadian Centre for Policy Alternatives. Retrieved from: http://www.wellesleyinstitute.com/wp-content/uploads/2011/03/Colour_Coded_Labour_MarketFINAL.pdf

18 Goldring, L. & Jolie, M-P. (2014). Immigration, Citizenship and Racialization at Work: Unpacking Employment Precarity in Southwestern Ontario. Just Labour: A Canadian Journal of Work and Society. 22 (Autumn): 94-121.

19 Premji, S., Shakya, Y., Spasevski, M., Merolli, J., & Athar, S. (2014). Precarious Work Experiences of Racialized Immigrant Women in Toronto: A Community-Based Study. Just Labour: A Canadian Journal of Work and Society. 22 (Autumn): 122-43.

20 Lewchuk, W. et al. (2016). The Precarity Penalty. alternate routes: a journal of critical social research.

21 Poverty and Employment Precarity in Southern Ontario. (2015). The Precarity Penalty.

22 City of Toronto. (2017, September 14). Backgrounder – 2016 Census: Income. City of Toronto: Social Research and Analysis Unit. Retreived from: https://www1.toronto.ca/City%20Of%20Toronto/Social%20Development,%20Finance%20&%20Administration/Shared%20Content/Demographics/PDFs/Census2016/2016%20Census%20Backgrounder%20Income%202017%2009%2014.pdf

23 Ministry of Health and Long-Term Care. (2016). Initial Report on Public Health: Health Unit Profiles. Government of Ontario. Retrieved from: http://www.health.gov.on.ca/en/public/publications/pubhealth/init_report/index.html

24 Toronto Foundation. (2016). Toronto Vital Signs Report 2016.

25 Block, S. (2010). Work and Health: Exploring the impact of employment on health disparities. Toronto: Wellesley Institute. Retrieved from: http://www.wellesleyinstitute.com/wp-content/uploads/2010/12/Work_and_Health.pdf

26 Health Quality Ontario. (2016). Income and Health: Opportunities to achieve health equity in Ontario. Toronto: Queen's Printer Ontario. Retrieved from: http://www.hqontario.ca/Portals/0/documents/system-performance/health-equity-report-en.pdf

27 Toronto Public Health. (2015). The Unequal City 2015: Income and Health Inequities in Toronto. Toronto Public Health: Surveillance and Epidemiology Unit.

28 Government of Ontario. (2017, September). Get coverage for prescription drugs: Get help paying for prescription drugs when you qualify for the Ontario Drug Benefit. Website: http://www.health.gov.on.ca/en/public/programs/drugs/programs/programs.aspx

29 Government of Ontario. (2017). 2017 Ontario Budget: Budget Papers. Toronto: Queen's Printer for Ontario. Retrieved from: http://www.fin.gov.on.ca/en/budget/ontariobudgets/2017/budget2017.pdf

30 Government of Ontario (2018, June, 30). "Ford Government Making OHIP+ More Cost-Effective." News Release: Ministry of Health and Long-Term Care. https://news.ontario.ca/mohltc/en/2018/06/ford-government-making-ohip-more-cost-effective.html

31 Barnes, S., & Anderson, L. (2015). Low Earnings, Unfilled Prescriptions.

32 Luiza, V.L., Chaves, L.A., Silva, R.M., Emmerick, I.C., Chaves, G.C., Fonseca de Araújo, S.C., Moraes, E.L., Oxman, AD. (2015). Pharmaceutical policies: effects of cap and co-payment on rational use of medicines. Cochrane Database Systematic Reviews. 8(5): CD007017.

33 Sketris, I., Ingram, E.L., Lummis, H. (2007). Optimal Prescribing and Medication Use in Canada: Challenges and Opportunities. Health Council of Canada. Retrieved from: http://publications.gc.ca/collections/collection_2007/hcc-ccs/H174-6-2007E.pdf

34 Mamdani MM, Tu K, Austin PC, Alter DA. (2002). Influence of socio-economic status on drug selection for the elderly in Canada. Annals of Pharmacotherapy; 36(5):804-808.

35 Daw, J. R., and S. G. Morgan. (2012). "Stitching the Gaps in the Canadian Public Drug Coverage Patchwork? A Review of Provincial Pharmacare Policy Changes from 2000 to 2010." Health Policy. 104(1): 19-26.

36 Torjman, S. (2017). Dismantling the Welfare Wall for Persons with Disabilities. Toronto: Caledon Institute.

37 Gemmill, M.C., Thomson, S., & Mossialos, E. (2008). What impact do prescription drug charges have on efficiency and equity? Evidence from high-income countries. International Journal for Equity in Health. 7(12): 1-22.

38 Barnes, S., & Anderson, L. (2015). Low Earnings, Unfilled Prescriptions.

39 Gouvernement du Québec. (n.d.). Prescription Drug Insurance. http://www.ramq.gouv.qc.ca/en/citizens/prescription-drug-insurance/Pages/description.aspx

40 Tamblyn, R. Eguale, T., Huang, A., Winslade, N., & Doran, P. (2014). The Incidence and Determinants of Primary Nonadherence With Prescribed Medication in Primary Care: A Cohort Study. Annals of Internal Medicine. 160(7): 441-50.

41 Morgan, S.G., Gagnon, M-A., Charbonneau, M., Vadeboncoeur, A. (2017). Evaluating the effects of Quebec's private-public drug insurance system. CMAJ. 189(40): E1259-E1263.

42 Gilbeau, E. (2017). National Public Drug Plan: The Quebec Model is Expensive and Unsustainable. Presentation at the Canadian Health Coalition Policy Conference on "A Prescription for Equity." Ottawa: Health Coalition. Retrieved from: http://www.healthcoalition.ca/wp-content/uploads/2017/04/Gibeau-E.pdf

43 Morgan, S.G., Gagnon, M-A., Charbonneau, M., Vadeboncoeur, A. (2017). Evaluating the effects of Quebec's private-public drug insurance system. CMAJ. 189(40): E1259-E1263.

44 Gagnon, M.-A. & Hébert, G. (2010). The economic case for universal pharmacare: Costs and benefits of publicly funded drug coverage for all Canadians. Ottawa: Canadian Centre for Policy Alternatives. Retrieved from: https://www.policyalternatives.ca/publications/reports/economic-case-universal-pharmacare

45 Morgan, E. (2017). A Prescription for Failure. Presentation at the Canadian Health Coalition Policy Conference on "A Prescription for Equity." Retrieved from: http://www.healthcoalition.ca/wp-content/uploads/2017/04/Morgan-E.pdf

46 Morgan, S., et al. (2015). Pharmacare 2020: The Future of Drug Coverage in Canada.

47 Gagnon, M-A. (2010) The Economic Case for Universal Pharmacare: Costs and Benefits of Publicly Funded Drug Coverage for all Canadians. Ottawa: The Canadian Centre for Policy Alternatives and Institut de Recherche et d'Informations Socio-economiques.

48 Government of the United Kingdom. (March 1, 2013). NHS charges from April 2013 announced. Retrieved from: https://www.gov.uk/government/news/nhs-charges-from-april-2013-announced

49 National Health Service. (2017). NHS in England: help with health costs. London: Government of the United Kingdom website. Retrieved from: http://www.nhs.uk/NHSEngland/Healthcosts/Pages/Prescriptioncosts.aspx

50 Morgan, S.G., Li, W., Yau, B., & Persaud, N. (2017). Estimated effects of adding universal public coverage of an essential medicines list to existing public drug plans in Canada. CMAJ. 189(8): E295-302.

51 Taglione, M.S., Ahmad, H., Slater, M., Aliarzadeh, B., Glazier, R.H., Laupacis, A., & Persaud, N. (2017). Development of a preliminary essential medicines list for Canada. CMAJ Open. 5(1): E1-13.

52 CLEAN Meds. (n.d.). Carefully Selected and Easily Accessible at No charge Medications. Toronto: St. Michael's Hospital. Website: http://cleanmeds.ca

53 Canadian Institute for Health Information (CIHI). (2016). Prescribed Drug Spending in Canada, 2016: A Focus on Public Drug Programs – international comparisons chart. Retrieved from: https://secure.cihi.ca/estore/productFamily.htm?locale=en&pf=PFC3333&lang=en

54 Owens, A., & Smith, J. (2017). National Pharmacare in Canada: 2019 or Bust? The School of Public Policy Research Papers, University of Calgary. 10(5): 31pp.

55 Taglione, M.S., Ahmad, H., Slater, M., Aliarzadeh, B., Glazier, R.H., Laupacis, A., & Persaud, N. (2017). Development of a preliminary essential medicines list for Canada. CMAJ Open. 5(1): E137-E143.

56 Law, M.R., Cheng, L., Dhalla, I.A., Heard, D., & Morgan, S.G. (2012). The effect of cost on adherence to prescription medications in Canada. CMAJ. 184(3): 297-302.

57 Toronto Foundation. (2016). Toronto Vital Signs Report 2016. Retrieved from: http://torontosvitalsigns.ca/wp-content/uploads/2016/10/WEB-OP-TorontosVitalSignsReport2016FINAL.pdf

58 City of Toronto. (2017, September 14). Backgrounder – 2016 Census: Income.

59 Benach, J., Vives, A., Amable, M., Vanroelen, C., Tarafa, G., & Muntaner, C. (2014). Precarious Employment: Understanding an Emerging Social Determinant of Health. Annual Review of Public Health. 35: 229-53.

60 Government of Ontario. (2017). The Changing Workplaces Review Final Report: An Agenda for Workplace Rights. Toronto: Ministry of Labour. P. 18. Retrieved from: https://www.ontario.ca/document/changing-workplaces-review-final-report?_ga=2.87915100.517829536.1495821870-1044971801.1495821870

61 Government of Ontario. (2017). The Changing Workplaces Review Final Report: An Agenda for Workplace Rights. Toronto: Ministry of Labour. P. 182. Retrieved from: https://www.ontario.ca/document/changing-workplaces-review-final-report?_ga=2.87915100.517829536.1495821870-1044971801.1495821870

62 Wellesley Institute. (2017). The Changing Workplaces Review – Response to the Final Report. Toronto: Wellesley Institute. Retrieved from: http://www.wellesleyinstitute.com/economics/the-changing-workplaces-review-response-to-the-final-report/

63 Lankin, F., & Sheikh, M.A. (2012). Brighter Prospects: Transforming Social Assistance in Ontario. A Report to the Minister of Community and Social Services. Government of Ontario, Commission for the Review of Social Assistance in Ontario.

64 Torjman, S. (2017). Dismantling the Welfare Wall for Persons with Disabilities. Toronto: Caledon Institute.

65 Income Security Reform Working Group. (2017, October). Income Security: A Roadmap for Change. Government of Ontario, Ministry of Community and Social Services. Retrieved from: https://files.ontario.ca/income_security_-_a_roadmap_for_change-english-accessible_updated.pdf

66 Law, M.R., Cheng, L., Dhalla, I.A., Heard, D., & Morgan, S.G. (2012). The effect of cost on adherence to prescription medications in Canada. CMAJ. 184(3): 297-302.

67 Morgan, S.G., Gladstone, E.J., Weymann, D., & Khan, N. (2017). The effects of catastrophic drug plan deductibles on older women's use of cardiovascular medicines: a retrospective cohort study. CMAJ Open. 5(1): e198-204.

68 Parliamentary Budget Officer. (September 2017). Federal Cost of a National Pharmacare Program. Ottawa: Office of the Parliamentary Budget Officer. Retrieved from: http://www.pbo-dpb.gc.ca/web/default/files/Documents/Reports/2017/Pharmacare/Pharmacare_EN.pdf

Facilitators to accessing primary and preventive care for immigrants and refugees in Canada: A Literature Review

By: Anjana Aery

Wellesley Institute
advancing urban health

September 2018

Wellesley Institute works in research and policy to improve health and health equity in the GTA through action on the social determinants of health.

By: Anjana Aery

Report

Copies of this report can be downloaded from www.wellesleyinstitute.com.

Statement on Acknowledgement of Traditional Land
We would like to acknowledge this sacred land on which the Wellesley Institute operates. It has been a site of human activity for 15,000 years. This land is the territory of the Huron-Wendat and Petun First Nations, the Seneca, and most recently, the Mississaugas of the Credit River. The territory was the subject of the Dish With One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes.

Today, the meeting place of Toronto is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work in the community, on this territory.

Revised by the Elders Circle (Council of Aboriginal Initiatives) on November 6, 2014

10 Alcorn Ave, Suite 300
Toronto, ON, Canada M4V 3B2
416.972.1010
contact@wellesleyinstitute.com

Wellesley Institute
advancing urban health

TABLE OF CONTENTS

Introduction

Primary care is an essential part of a high quality health care system, where care is well coordinated and integrated across the care continuum.[1] In Canada, regular access to primary care provides opportunities for early intervention and disease prevention. Primary care is the first point of contact with the health care system focusing on health care services for health promotion, illness and injury prevention and diagnosis and treatment of illness and injury.[2] Primary care providers are most familiar with their patients' medical history and can follow their health care needs.[3] This ongoing relationship establishes a rapport between patient and provider and patients are more likely to be satisfied with their care and trust their provider.[4] Higher continuity of care with primary care providers is associated with fewer hospital admissions for preventable conditions.[5] Primary care providers can also promote preventive care such as screening for high blood pressure and depression and promoting uptake of cancer screenings.

Immigrants and refugees often have poor access to health care compared to the general population.[6,7,8] In general, recent immigrants have lower rates of primary care and mental health care use compared to the Canadian-born population.[9] Research has shown South Asian women have lower breast cancer screening rates and newcomers from East Asian and Pacific regions have lower mental health care use.[10,11] Immigrants and refugees may have lower health care service use but this doesn't necessarily mean they have less need for health care services. For example, Ontario has organized cancer screening programs where all eligible Ontarians are recommended to get screened.[12] Therefore, the lower breast cancer screening rates among some immigrant women indicates poor access to a service where women would have a similar level of need. Refugee women have a higher risk of severe maternal morbidity and risk of HIV than immigrants or non-immigrant women in Ontario.[13] A study of Ethiopian immigrants and refugees in Toronto, found only 12.5% of individuals who reported a mental health concern received services from formal health care providers.[14] In another study, immigrant seniors were screened less for diabetes than non-immigrant seniors and many high risk ethnic groups had multiple physician visits before a test was administered.[15] Facing barriers to accessing timely, appropriate primary care and screening may lead to poorer health outcomes, including illnesses that require acute care. For newcomers, a lack of awareness of available health services and delays in accessing health care can also lead to worsening health conditions.[16]

Many immigrants and refugees may not have access to a regular primary care doctor when they first settle in Canada and experience challenges in maintaining good health.[17] Even immigrants and refugees who have a primary care provider may face challenges that impact their access to care. Barriers to accessing primary health care can include a lack of culturally appropriate services and cultural barriers that influence health care seeking behaviour.[18,19] For example, studies have shown that many South Asian immigrant women prefer a female

physician.[20] Language barriers may also impact the ability to effectively communicate with a provider and immigrants and refugees may have limited knowledge of the health care system and how primary health care works in Canada.[21] There are also challenges within the health care system such as long wait times for referrals to specialists and lack of coverage for prescription medications that can impact access to care.[22,23] There is less known about effective interventions that can improve access to primary care for both immigrants and refugees. This literature review was conducted to gather evidence on facilitators that enhance access to primary and preventive care and interventions that have been implemented in Canada. The primary aim of this literature review is to explore:

1. What interventions or programs facilitate access to primary and preventive care for immigrants and refugees in Canada?
2. What has worked well and in what contexts?

Methods

A search strategy was developed in consultation with a University of Toronto Health Sciences librarian. Peer-reviewed, academic literature was searched in the SCOPUS and MEDLINE databases (see Appendix A for details). The search was restricted geographically to cities and regions in Canada. The main search terms included (a) immigrants or refugees as the target population, and (b) primary health care search terms for the MEDLINE database. To narrow the search on the SCOPUS database an additional search term for programs, interventions, policies, strategies, models or case studies was added to identify literature on facilitators to access to care. Search terms for access to primary care and preventive care services were cancer screenings, chronic disease management and mental health care. Mental health care was part of this study because many immigrants and refugees may seek mental health care in primary care settings and primary care doctors may screen for mental health.[24,25] Primary care and preventive care was defined as health care provided by a family physician or nurse practitioner or in a primary care setting. Preventive care could include Pap tests or breast cancer screening when delivered by a primary care provider or a team that included a primary care provider.

Inclusion/Exclusion criteria

The inclusion criteria were as follows: the study was conducted in Canada, articles were published in English from the year 2000 to present and articles described a program or intervention, that had been implemented and evaluated. Articles were included if they primarily focus on facilitators that improved access to primary and/or preventive care. Articles were excluded if they did not include primary care or if they focused only on barriers to care. Articles on undocumented or uninsured populations were also excluded because these

subgroups lack access to basic provincial health coverage and may face unique barriers to care that were beyond the scope of this review.

Analysis

A data extraction table was created, and data was extracted by the author from each article. For all articles a description of the program or intervention was included and any details on how it was implemented or evaluated. Information on the aims of the intervention, target population, methods, sample size, study location, type of care and setting were also charted. The key findings and lessons learned from each article was summarized in the data extraction table. After charting the data, the findings and descriptions of lessons learned were analyzed thematically and compared across all articles to distill key themes on facilitating access to care for immigrants and refugees.

Mapping Key Barriers or Facilitators Targeted

Recent work by Batista et al. helps to identify the key barriers that may affect access to care for immigrants and refugees including eligibility for care, cultural barriers, language barriers, organization of services, geographic access, costs of services, health education, social networks and support and the patient-provider relationship (Table 1).[26] For each article the type of barrier(s) or facilitator(s) targeted was mapped to Batista et al.'s framework (Table 1). Although Batista et al.'s framework describes barriers that affect access to care, strategies or interventions that address any of the barriers will point to facilitators that support greater access to care. For example, language barriers were identified as a barrier to care so interventions that offer language interpretation services can act as a facilitator to care. The Batista et al. framework provides an overview of potential areas interventions or programs could focus on the facilitate access to care for this population. The framework was adapted to include intersectoral collaboration which can act as a facilitator to support access to care for immigrants and refugees.[27]

Table 1 – Types of barriers or facilitators to care affecting immigrants and/or refugees

Type of Barrier or Facilitator	Description
Insurance/eligibility	Insurance status and eligibility to receive health care services and right to health
Cultural barriers	Relevant aspects affecting access and use of services such as perceptions about health and health care, preference for specific health care options, distrust, stigmatization and discrimination, isolation

Type of Barrier or Facilitator	Description
Language/communication barriers	Low ability to speak the official language and communication difficulties
Organization of services/quality of care	Lack of knowledge of the health system, no regular source of care, long waiting lists, shortage of services, low quality of care
Geographic access	Unavailability of services in the area, long distances from health services, lack or difficulties with transportation
Economics/costs of services	Economic issues such as low income and costs of some health services
Education/health literacy	Low health education, lack of information on health risks
Social networks/support	Social networks and social support, community participation
Patient-provider relationship	Patient-provider relationships, provider's cultural sensitivity, trust between patient and provider
Intersectoral collaboration*	Coordination and integration of services between health and other sectors such as settlement agencies

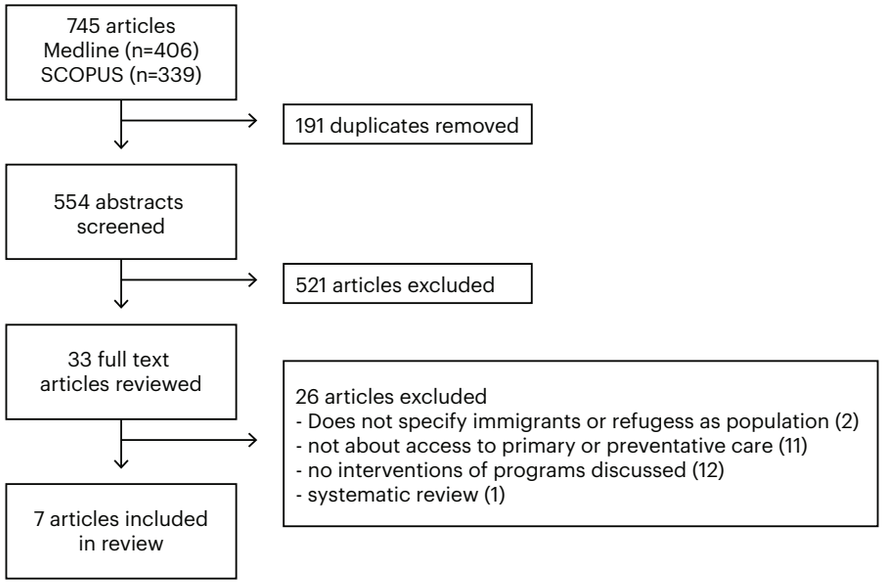
*Added to Batista et al. framework

Results

The SCOPUS and MEDLINE search resulted in 745 articles and was conducted as of May 1, 2017. After removing duplicates and articles that did not meet the inclusion criteria there were 7 articles included in the final review (see Figure 1 for details). These 7 articles described an intervention or program that had been implemented and evaluated (see Table 2). 3 articles focused on access to mental health care in primary care, 1 article on breast cancer screening, 2 articles on access to cervical and breast cancer screening and 1 article on access to primary care more broadly. Geographically, the articles reflect the following cities and regions: 5 studies in Toronto, Ontario, in the Greater Toronto Area (GTA)[1], Ontario, 1 in Kitchener, Ontario. The studies were primarily located in urban settings, reflecting the settlement patterns of the majority of immigrants and refugees arriving to Canada.[28] The main elements of the interventions and key facilitators used to enhance access to care included: culturally-tailored interventions, intersectoral collaboration, the use of innovative screening tools and community-based care models are described below.

1 The Greater Toronto Area includes the city of Toronto and four regional municipalities: Durham, Halton, Peel, and York.

Figure 1 – Overview of Search Strategy



Culturally-tailored Interventions

All 7 studies indicated the importance of addressing language, culture and health education needs for newcomer populations. For example, a breast cancer screening intervention for South Asian immigrant women aimed to increase overall knowledge about breast cancer and risk factors to encourage screening.[29] The research team published information on breast cancer screening in Hindi and Urdu in community newspapers. The information was tailored to be culturally appropriate for South Asian immigrant women. By using a community newspaper, the health promotion messages were shared not only with immigrant women but with their families. This can be important for South Asian women who seek medical advice not only from medical professionals but from close family members and friends.[30] South Asian immigrant women had intense fears of breast cancer so the information presented the risk factors and the benefits of early detection in simple language to alleviate fears. It also provided evidence to address misperceptions of low susceptibility to breast cancer and low survival rates after diagnosis. To be sensitive to the social and cultural context of the target population the messages also emphasized the improvement to women's health as well as the quality of family life.

The series of articles also included information on how to get referred, what breast cancer screening involves and the availability of female health professionals. Participants who had never been screened before were recruited and completed a pre-survey about their knowledge of breast cancer screening. Participants were mailed the health promotion articles and after 2 weeks a post-survey was conducted to assess change in knowledge about breast cancer

screening. After the intervention, there was a significant increase in self-reporting having a routine physical checkup and clinical breast exam.[31]

Intersectoral Collaboration

One article focused on intersectoral collaboration and reorganizing care delivery. The article evaluated the impact of a new refugee health clinic on access to primary care for government assisted refugees settling in Kitchener, Ontario.[32] The dedicated health clinic for refugees used a community-based primary care approach where primary care providers and a local settlement agency, Reception House, worked collaboratively to facilitate access to care. Reception House staff completed intake of new refugees. After intake, refugees were referred to a nurse and resident from the refugee health clinic accompanied by an interpreter or case worker from Reception House. The case worker provided support in navigating the health care system and refugees were transferred to a permanent primary care provider. The settlement agency and health clinic staff worked closely together to ensure newly arrived refugees would have access to health care while receiving other settlement related services as they establish themselves in a new city.

After opening the new refugee clinic, refugees had a 30% decrease in wait time to see a health care provider, and an 18% increase in refugees finding a permanent family physician in the community in the year after their arrival.[33] The collaboration with a settlement agency could be replicated in other primary care settings and illustrates the benefits of intersectoral collaboration and the co-location of services to serve the refugee population.

Innovative Screening Tools

Another key intervention was the use of innovative screening tools to increase access to appropriate services.[34, 35, 36] Researchers in Toronto developed a tablet-based survey for patients to complete prior to their appointment. The survey was tested in several languages and gathered patient data related to mental health and social situations. After completing the survey, patients received a tailored list of resources in their language. If they were at risk for mental health concerns they were encouraged to discuss the concerns with their provider. The provider also received a summary of the patient's responses attached to the patient's medical record. A feasibility study showed patients found the tool to be acceptable and providers gained a greater understanding of mental health issues impacting immigrants or refugees.[37]

A randomized control trial of the intervention showed patients who received the tool were more likely to discuss mental health concerns with their provider with 58.7% of patients in intervention group discussing mental health compared to 40.3% in the usual care group ($p \leq 0.05$).[38] This innovative tool gathered routine information that providers could use during

a consultation to facilitate better care. These discussions can create opportunities to raise sensitive topics as part of a primary care consultation, contributing to better detection rates of mental health problems in primary care. In this case, the tool was piloted in a community health centre that had access to social workers and mental health supports at limited cost to patients. Enhanced screening practices in primary care can improve awareness of services that could benefit patients and facilitate referrals to existing services and supports.

Community-based Care Models

The Cancer Awareness: Ready for Education and Screening (CARES) program on promoting cervical cancer and breast cancer screening in Toronto included language-specific group educational sessions, peer-based support and partnering with community agencies for outreach to immigrant women. 42 peer leaders attended a 3-day training to lead group educational sessions. Sessions were conducted in English, Bengali, Urdu, Punjabi, Hindi, Tamil, Vietnamese, Khmer, Karen, Mandarin, Cantonese, Farsi, Dari, Arabic, Spanish and Portuguese reflecting the diversity of immigrant and refugee populations in Toronto. Additionally, the program used a health bus for Pap testing, assisted with appointment booking and transportation and conducted outreach through community agencies and peer leaders.[39] This multi-pronged approach employed peer leaders to promote awareness on breast cancer and cervical cancer screening in the community and facilitated access through outreach and offering transportation. Women in the CARES program intervention were more likely to get screened compared to women who did not attend the program after an 8-month follow-up period.

Similarly, a mobile health clinic focusing on access to reproductive health care including cancer screening was based out of a van so the care team could travel to central locations where many immigrant women in the community worked and lived.[40] These two interventions sought to address geographic barriers to access for women who had never been screened or were under screened by bringing services out into the community.[41, 42]

Discussion

Despite the limited evidence, the programs identified in this review point to promising practices to improve access to primary and preventive care. In all cases, the primary care settings were interprofessional in nature and employed team-based care models. However, many newcomers have primary care physicians in the community that have independent practices. Consequently, it's important to connect these physicians with resources that could support their immigrant and refugee patients. Three studies showed the importance of building networks and partnerships with community organizations to support access to health care for immigrants and refugees.[43, 44, 45]

Increasing primary care providers' capacity in recognizing mental health problems and educating patients is an important step in promoting mental health care for immigrants and refugees who often seek care in primary care. The tablet-based screening tool from Ahmad and colleagues (2017) is an effective tool that could be translated and used in other primary care settings, particularly team-based settings with co-located mental health supports. In addition, to being translated in other languages the mental health screening questions had cross-cultural validity and providers were trained on cultural issues related to mental health. The language used in the questions and summary reports were also tested to ensure the concepts were simple and easy to understand for patients.

Most studies targeted linguistic barriers, cultural barriers, health education and the organization of services as described in Table 1. However, there was a lack of attention on structural barriers such as geographic access, the cost of mental health services and reorienting service delivery. For breast cancer and cervical cancer screening, transportation was often cited as a major barrier to accessing care but only two programs provided transportation services for cancer screening.[46, 47] Many community organizations and community health centres offer counselling to patients at no cost but for many patients in Ontario this is not the case. Therefore, mental health care remains inaccessible to many Ontarians who cannot afford to seek professional mental health support which can include recent immigrants and refugees.

Programs attempt to address both individual and structural level barriers but programs targeted to individuals are easier to implement.[48] Although language supports, cultural competency and health education are important to address for the diverse populations of immigrants and refugees, these supports tend to focus on the provider and patient and not look at upstream factors that may be affecting access to high quality and timely care. The benefits of co-locating services and promoting outreach models illustrate how community health centers and interprofessional teams are promising practices for serving immigrants and refugees.[49] Only 1 intervention evaluated a care delivery model with intersectoral collaboration and showed promising results. Investing in interprofessional care and reducing geographic inequities that limit the accessibility of existing health care services are necessary to advance immigrant and refugee health.

This literature review demonstrates the need for comprehensive health care where primary care services are better integrated, prioritizing community engagement providing culturally sensitive training and leveraging intersectoral collaboration to improve access to care for immigrants and refugees. At a systems-level, organizations can consider maintaining links with community-based organizations, ensuring a strong representation of racial and cultural communities among staff and creating specific policies and programs on professional language interpretation to better serve diverse immigrant and refugee populations.[50]

There were, however, some limitations to this review. The search strategy did not include articles focused specifically on ethnocultural groups. While there are many shared characteristics between immigrants and refugees and racialized populations in general, if the article did not specify that people born outside of Canada were a part of the target population it was not included. There is considerable value in looking at how interventions have been developed, implemented and tested for populations whose experiences may be closely aligned with those of refugees and immigrants. However, interventions that focused on specific ethnocultural communities were beyond the scope of this review. Additionally, the literature review only focused on academic literature but there may be more implementation evidence in grey literature and program evaluations. However, there is a need for more evidence on rigorously tested interventions that are adequately described and much of the grey literature does not include detailed descriptions of interventions that can be scaled up or replicated in other settings.

Conclusion

This literature review summarizes key Canadian evidence in facilitating access to primary and preventive health care for immigrants and refugees. The results highlight the effectiveness of interprofessional and team-based care models in serving immigrant and refugee populations, the importance of peer-based support to address social, cultural and language barriers and leveraging the networks of community-based organizations that serve these diverse populations for outreach and system navigation. There is a need for more rigorous evaluation of targeted interventions that improve care for immigrant and refugee populations and have been adapted for different settings. This can support the development of evidence-informed strategies and policies that advance the health of diverse of immigrant and refugee populations.

Study	Target Population	Method	Sample	Location	Type of care	Aim	Intervention or Program Description	Barrier/ Facilitator Targeted*	Key Findings
McMurray, Breward, Breward, Alder & Arya (2014)	refugees	quantitative (before and after survey design)	466 patients before and 406 patients after	Kitchener, ON	primary care	assessment impact of a dedicated refugee health clinic on primary care access	A refugee health clinic was developed where comprehensive care is delivered by family physicians in collaboration with a settlement agency that provided language supports and case workers to help refugees navigate the health system.	Cultural Barriers Language/ communication barriers Organization of services/ quality of care Education/ Health Literacy Social Networks/support Patient-provider relationship Intersectoral Collaboration	After establishment of the refugee health clinic there was a 30% decrease in wait times to see a health care provider, and a 18% increase in refugees finding a permanent family physician in the community in the year after their arrival. Also, there was a decrease in referrals for specialist care and increased support from primary care team.
Ferrari, Ahmad, Shakya, Ledwos, McKenzie (2016)	immigrant, refugee and racialized population (almost all were immigrants)	mixed methods (survey and focus groups)	74 patients	Toronto, ON	primary mental health care	measuring patient and provider acceptance of web-based tool for mental health assessment	A tablet-based, survey to assess mental health completed by clients in waiting room before appointment in a community health centre. Tailored output on risks and recommendations generated for both client and provider.	Cultural Barriers Language/ communication barriers Organization of services/quality of care Education/ Health Literacy	A touch-screen based survey was acceptable and easy to use for the majority of clients. Clients and providers agreed with perceived benefits of tool. Clients had mixed opinions about privacy barriers and privacy was not identified as a major barrier to using the survey.
Ahmad, Shakya, Li, Norman, Lou, Abuelaish & Ahmadzi (2012)	adult Afghan refugees	quantitative (RCT)	49 patients (25 in intervention and 24 in usual care group)	Toronto, ON	primary mental health care	examine potential of web-based tool to integrate medical and social services by assessing psychosocial risk	A tablet-based, survey in Farsi or Dari to assess psychosocial completed by clients in waiting room before appointment in a primary care setting. Tailored output on risks and recommendations generated for both client and provider.	Cultural Barriers Language/ communication barriers Organization of services/quality of care Education/ Health Literacy	72% of participants in intervention group had intention to visit a psychosocial counselor compared to 46 % in usual care group. Intervention group had similar patient satisfaction to usual care and agreed on benefits of tool.
Ahmad, Lou, Shakya, Ginsburg, Ng, Rashid, Dinca-Panaitescu, Ledwos & McKenzie (2017)	immigrant, refugee and racialized ethnoracial communities	quantitative (RCT)	148 patients (75 in intervention and 72 in usual care group)	Toronto, ON	primary mental health care	measure efficacy of web-based tool for improving discussion about mental health issues and detection of mental illness	A tablet-based, survey to assess mental health completed by clients in waiting room before appointment in a primary care setting. Tailored output on risks and recommendations generated for both client and provider.	Cultural Barriers Language/ communication barriers Organization of services/quality of care Education/ Health Literacy	Mental health discussion occurred for 58.7% of patients in the intervention group vs 40.3% in the usual care group.

Study	Target Population	Method	Sample	Location	Type of care	Aim	Intervention or Program Description	Barrier/ Facilitator Targeted*	Key Findings
Ahmad, Cameron & Stewart (2005)	South Asian immigrant women	quantitative (pre-post design)	74 participants	Greater Toronto Area (GTA), ON	breast cancer screening	increase overall knowledge about breast cancer and screening	A series of socioculturally tailored breast-health articles published in Urdu and Hindi community newspapers	Cultural Barriers Language/ communication barriers Education/Health Literacy	After the intervention, there was a significant increase in self-reporting 'ever had' routine physical checkup and clinical breast exam. After the intervention participants had greater knowledge of breast cancer risk factors.
Dunn, Lofters, Ginsburg, Meaney, Ahmad, Moravac, Nguyen & Arisz (2016)	immigrant, refugee and marginalized (low-income) women	quantitative (matched cohort)	331 cases for Pap-eligible group and 206 cases for mammography-eligible group	Toronto, ON	breast and cervical cancer screening	assess the impact of CARES (Cancer Awareness: Ready for Education and Screening) intervention on cervical and mammography screening	A community-based program aimed to improve breast and cervical screening among marginalized women. Key components include outreach through a network of community agencies and peer leaders, language-specific group educational sessions cofacilitated by peer leaders, and offered transportation, system navigation, or language support	Cultural Barriers Language/ communication barriers Organization of services/quality of care Geographic access Education/ Health Literacy Social Networks/ support	Of women eligible for screening, after program 26% and 36% had Pap and mammography, respectively, versus 9% and 14% of under or never-screened (UNS) controls. In the 8 months following education sessions, program participants were significantly more likely to be screened than their matched controls.
Guruge, Hunter, Barker, McNally & Magalhaes (2010)	Portuguese-speaking immigrant women	qualitative (interviews)	7 immigrant women	Toronto, ON	breast and cervical cancer screening	describe experiences of clients using mobile health clinic for reproductive health care	Mobile health clinic (MHC) staffed with a primary care nurse practitioner, a physician, a counsellor, and an intake person Provides access to reproductive health care including: contraception, pregnancy and abortion counselling, sexually transmitted infections, and cervical and breast cancer screening	Insurance/ Eligibility Cultural Barriers Language/ communication barriers Geographic access Education/ Health Literacy Social Networks/support Patient-provider relationship	Clients found receiving care in mobile health clinic was acceptable and were satisfied with care. It was accessible and offered language and culture-specific support.

Endnotes

1 Commonwealth Fund. Framework for a high performance health system for the United States. 2006. Available from: http://www.commonwealthfund.org/~/media/files/publications/fund-report/2006/aug/framework-for-a-high-performance-health-system-for-the-united-states/commission_framework_high_performance_943-pdf.pdf

2 Government of Canada. About primary health care. 2012. Available from: https://www.canada.ca/en/health-canada/services/primary-health-care/about-primary-health-care.html

3 Government of Canada. About primary health care. 2012. Available from: https://www.canada.ca/en/health-canada/services/primary-health-care/about-primary-health-care.html

4 Saultz JW. Interpersonal Continuity of Care and Patient Satisfaction : A Critical Review. Ann Fam Med. 2004;445–51.

5 Barker I, Steventon A, Deeny SR. Association between continuity of care in general practice and hospital admissions for ambulatory care sensitive conditions: cross sectional study of routinely collected, person level data. BMJ. 2017;j84.

6 Muggah E, Dahrouge S, Hogg W. Access to primary health care for immigrants: results of a patient survey conducted in 137 primary care practices in Ontario, Canada. BMC Fam Pract. 2012;13(1):128.

7 Asanin J, Wilson K. "I spent nine years looking for a doctor": Exploring access to health care among immigrants in Mississauga, Ontario, Canada. Soc Sci Med. 2008;66(6):1271–83.

8 Kalich A, Heinemann L, Ghahari S. A Scoping Review of Immigrant Experience of Health Care Access Barriers in Canada. J Immigr Minor Heal. 2016; 18(3):697-709.

9 Gushulak BD, Pottie K, Roberts JH, Torres S, DesMeules M. Migration and health in Canada: health in the global village. CMAJ. 2011;183(12):E952–8.

10 Vahabi M, Lofters A, Kumar M, Glazier RH. Breast cancer screening disparities among immigrant women by world region of origin: a population-based study in Ontario, Canada. Cancer Med. 2016;5(7):1670–86.

11 Durbin A, Moineddin R, Lin E, Steele LS, Glazier RH. Mental health service use by recent immigrants from different world regions and by non-immigrants in Ontario, Canada: a cross-sectional study. BMC Health Serv Res. 2015;15(1):336.

12 Cancer Care Ontario. Get Checked for Cancer. Available from: https://www.cancercareontario.ca/en/get-checked-cancer

13 Wanigaratne S, Cole DC, Bassil K, Hyman I, Moineddin R, Urquia ML. Contribution of HIV to Maternal Morbidity Among Refugee Women in Canada. 2015;105(12):2449-56

14 Fenta H, Hyman I, Noh S. Health service utilization by ethiopian immigrants and refugees in Toronto. J Immigr Minor Heal. 2007;9(4):349-57.

15 Creatore MI, Booth GL, Manuel DG, Moineddin R, Glazier RH. Diabetes screening among immigrants: a population-based urban cohort study. Diabetes Care. 2012;35(4):754–61.

16 Beiser M. The health of immigrants and refugees in Canada. Canadian Journal of Public Health. 2005; 96:S30-44.

17 Asanin J, Wilson K. "I spent nine years looking for a doctor": Exploring access to health care among immigrants in Mississauga, Ontario, Canada. Soc Sci Med. 2008;66(6):1271–83.

18 Anderson LM, Scrimshaw SC, Fullilove MT, Fielding JE, Normand J. Culturally competent healthcare systems: A systematic review. American Journal of Preventive Medicine. 2003;24(3):68-79.

19 Ahmad F, Jandu B, Albagli A, Angus JE, Ginsburg O. Exploring ways to overcome barriers to mammography uptake and retention among South Asian immigrant women. Health Soc Care Community. 2013;21(1):88–97.

20 Ahmad F, Mahmood S, Pietkiewicz I, McDonald L, Ginsburg O. Concept mapping with South Asian immigrant women: barriers to mammography and solutions. J Immigr Minor Heal. 2012;14(2):242–50.

21 Kalich A, Heinemann L, Ghahari S. A Scoping Review of Immigrant Experience of Health Care Access Barriers in Canada. J Immigr Minor Heal. 2016; 18(3):697-709.

22 Sanmartin C, Ross N. Experiencing Difficulties Accessing First- Contact Health Services in Canada. Healthc Policy. 2006;1(2):103–19.

23 Batista R, Pottie K, Bouchard L, Ng E, Tanuseputro P, Tugwell P. Primary Health Care Models Addressing Health Equity for Immigrants: A Systematic Scoping Review. J Immigr Minor Heal. 2016;20(1):214–230.

24 Ahmad F, Shakya Y, Ginsburg L, Lou W, Ng PT, Rashid M, et al. Burden of common mental disorders in a community health centre sample. Can Fam Physician. 2016;62(12):e758–66.

25 McKenzie K. Issues and Options for Improving Services for Diverse Populations. Can J Community Ment Heal. 2016;34(4):69–88.

26 Batista R, Pottie K, Bouchard L, Ng E, Tanuseputro P, Tugwell P. Primary Health Care Models Addressing Health Equity for Immigrants: A Systematic Scoping Review. J Immigr Minor Heal. 2016;20(1):214–230.

27 Pottie K, Batista R, Mayhew M, Mota L, Grant K. Improving delivery of primary care for vulnerable migrants: Delphi consensus to prioritize innovative practice strategies. Can Fam Physician. 2014;60(1):e32–40.

28 Statistics Canada. Immigration and Ethnocultural Diversity in Canada. 2016. Available from: http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-010-x/99-010-x2011001-eng.cfm

29 Ahmad F, Cameron JI, Stewart DE. A tailored intervention to promote breast cancer screening among South Asian immigrant women. Soc Sci Med. 2005;60(3):575–86.

30 Ahmad F, Cameron JI, Stewart DE. A tailored intervention to promote breast cancer screening among South Asian immigrant women. Soc Sci Med. 2005;60(3):575–86.

31 Sanmartin C, Ross N. Experiencing Difficulties Accessing First- Contact Health Services in Canada. Healthc Policy. 2006;1(2):103–19.

32 Gushulak BD, Pottie K, Roberts JH, Torres S, DesMeules M. Migration and health in Canada: health in the global village. CMAJ. 2011;183(12):E952–8.

33 McMurray J, Breward K, Breward M, Alder R, Arya N. Integrated primary care improves access to healthcare for newly arrived refugees in Canada. J Immigr Minor Heal. 2014;16(4):576–85.

34 Ferrari M, Ahmad F, Shakya Y, Ledwos C, McKenzie K. Computer-assisted client assessment survey for mental health: Patient and health provider perspectives. BMC Health Serv Res. 2016;16(1).

35 Ahmad F, Shakya Y, Li J, Khoaja K, Norman CD, Lou W, et al. A pilot with computer-assisted psychosocial risk-assessment for refugees. BMC Med Inform Decis Mak. 2012;12:71.

36 Ahmad F, Lou W, Shakya Y, Ginsburg L, Ng PT, Rashid M, et al. Preconsult interactive computer-assisted client assessment survey for common mental disorders in a community health centre: a randomized controlled trial. CMAJ Open. 2017;5(1):E190-E197.

37 Ferrari M, Ahmad F, Shakya Y, Ledwos C, McKenzie K. Computer-assisted client assessment survey for mental health: Patient and health provider perspectives. BMC Health Serv Res. 2016;16(1).

38 Ahmad F, Lou W, Shakya Y, Ginsburg L, Ng PT, Rashid M, et al. Preconsult interactive computer-assisted client assessment survey for common mental disorders in a community health centre: a randomized controlled trial. CMAJ Open. 2017;5(1):E190-E197.

39 Dunn SF, Lofters AK, Ginsburg OM, Meaney CA, Ahmad F, Moravac MC, et al. Cervical and Breast Cancer Screening After CARES: A Community Program for Immigrant and Marginalized Women. American Journal of Preventive Medicine. 2016;52(5):589-597

40 Guruge S, Hunter J, Barker K, McNally MJ, Magalhaes L. Immigrant women's experiences of receiving care in a mobile health clinic. J Adv Nurs. 2010;66(2):350-359.

41 Dunn SF, Lofters AK, Ginsburg OM, Meaney CA, Ahmad F, Moravac MC, et al. Cervical and Breast Cancer Screening After CARES: A Community Program for Immigrant and Marginalized Women. American Journal of Preventive Medicine. 2016;52(5):589-597

42 Guruge S, Hunter J, Barker K, McNally MJ, Magalhaes L. Immigrant women's experiences of receiving care in a mobile health clinic. J Adv Nurs. 2010;66(2):350-359.

43 McMurray J, Breward K, Breward M, Alder R, Arya N. Integrated primary care improves access to healthcare for newly arrived refugees in Canada. J Immigr Minor Heal. 2014;16(4):576–85.

44 Dunn SF, Lofters AK, Ginsburg OM, Meaney CA, Ahmad F, Moravac MC, et al. Cervical and Breast Cancer Screening After CARES: A Community Program for Immigrant and Marginalized Women. American Journal of Preventive Medicine. 2016;52(5):589-597

45 Guruge S, Hunter J, Barker K, McNally MJ, Magalhaes L. Immigrant women's experiences of receiving care in a mobile health clinic. J Adv Nurs. 2010;66(2):350-359.

46 Dunn SF, Lofters AK, Ginsburg OM, Meaney CA, Ahmad F, Moravac MC, et al. Cervical and Breast Cancer Screening After CARES: A Community Program for Immigrant and Marginalized Women. American Journal of Preventive Medicine. 2016;52(5):589-597

47 Guruge S, Hunter J, Barker K, McNally MJ, Magalhaes L. Immigrant women's experiences of receiving care in a mobile health clinic. J Adv Nurs. 2010;66(2):350-359.

48 Ahmad F, Jandu B, Albagli A, Angus JE, Ginsburg O. Exploring ways to overcome barriers to mammography uptake and retention among South Asian immigrant women. Health Soc Care Community. 2013;21(1):88–97.

49 Aery A. Innovations to Champion Access to Primary Care for Immigrants and Refugees. 2017. Wellesley Institute. Available from: http://www.wellesleyinstitute.com/wp-content/uploads/2017/03/Innovations-to-champion-access-to-primary-care-for-immigrant-and-refugees.pdf

50 Ganesan S, Janzé T. Overview of Culturally-Based Mental Health Care in Vancouver. Transcult Psychiatry. 2005;42(3):478–90.

Appendix A: Search Strategy

SCOPUS Search

((TITLE-ABS-KEY (immigra* OR refugee* OR migrant* OR newcomer* OR “asylum seeker*”) AND TITLE-ABS-KEY (“preventive care” OR “preventive health” OR “preventative care” OR “preventative health” OR “mental health” OR “chronic disease” OR “chronic condition” OR “cancer screening” OR “primary PRE/3 care” OR “primary health*”) AND TITLE-ABS-KEY (program* OR practice* OR project* OR pilot* OR strategy OR “strategies” OR initiative* OR intervention* OR policy OR policies OR model OR “case study”)) AND TITLE-ABS-KEY (canad* OR quebec* OR ontario* OR “New Brunswick*” OR newfoundland* OR alberta* OR “British Columbia*” OR manitoba* OR saskatchewan* OR “Prince Edward Island*” OR “Northwest Territories*” OR nunavut* OR yukon* OR “Nova Scotia*”)) AND (PUBYEAR > 1999) AND (LIMIT-TO (LANGUAGE , “English “))

MEDLINE Search

1. exp “Emigrants and Immigrants”/

2. exp Refugees/

3. 1 or 2

15. exp Primary Health Care/

16. exp Family Practice/ or exp General Practice/

17. exp Chronic Disease/

18. exp Preventive Medicine/

19. exp Health Services Accessibility/

20. exp “Delivery of Health Care”/

21. “mental health”.mp.

22. exp “mental health service”/

23. 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22

24. (Canad* or Quebec* or Ontario* or “New Brunswick*” or Newfoundland* or Alberta* or “British Columbia*” or Manitoba* or Saskatchewan* or “Prince Edward Island*” or “Northwest Territories*” or Nunavut* or Yukon* or “Nova Scotia*” or Toronto* or Vancouver* or Montreal*).mp.

25. exp “Canada”/

26. 24 or 25

27. 3 and 23 and 26

28. limit 27 to (english language and yr=”2000 -Current” and journal article)

Harm Reduction

Harm Reduction is an evidence-based, client-centred approach that seeks to reduce the health and social harms associated with addiction and substance use, without necessarily requiring people who use substances from abstaining or stopping.[i] Included in the harm reduction approach to substance use is a series of programs, services and practices. Essential to a harm reduction approach is that it provides people who use substances a choice of how they will minimize harms through non-judgemental and non-coercive strategies in order to enhance skills and knowledge to live safer and healthier lives.

Harm reduction acknowledges that many individuals coping with addiction and problematic substance use may not be in a position to remain abstinent from their substance of choice. The harm reduction approach provides an option for users to engage with peers, medical and social services in a non-judgemental way that will 'meet them where they are.' [ii] This allows for a health oriented response to substance use, and it has been proven that those who engage in harm reduction services are more likely to engage in ongoing treatment as a result of accessing these services. Some harm reduction initiatives have also reduced blood borne illnesses such as HIV/AIDS and Hepatitis C, and have decreased the rates of deaths due to drug overdoses.[iii]

What are some examples of harm reduction?

Some practices that take a harm reduction approach include: using a nicotine patch instead of smoking, consuming water while drinking alcohol, using substances in a safe environment with someone they trust, and needle exchange programs for people who inject drugs. Harm reduction doesn't just apply to the use of substances. We engage in harm reduction in our everyday lives to minimize a risk, such as wearing a helmet when riding a bike or enforcing seatbelts when driving in a car.

Overdose Prevention Sites (which are also referred to as supervised injection services or safe consumption sites) are facilities that fall under the umbrella of harm reduction. These facilities are health services that provide a hygienic environment for people to consume substances under the supervision of medical professionals. In addition to supervised injection, individuals are provided with sterile supplies, education on safer consumption, overdose prevention and intervention, medical and counselling services, and referrals to drug treatment, housing, income support and other services. Overdose prevention sites have been known to reduce costs for the health care system, prevent blood borne illnesses such as HIV or Hepatitis C, helps individuals access supportservices and prevent overdose deaths. In addition, research shows that the existence of an overdose prevention site in a community does not lead to increased crime, and works to decrease public substance consumption. These facilities are helpful in reducing the harms related to substances, particularly opioids. Overdose prevention sites are an evidence-based component to a comprehensive treatment response.

In order to further understand the philosophy behind Harm Reduction, it is important to discuss the main features, which include:

Source: https://ontario.cmha.ca/harm-reduction/

- *Pragmatism:* Harm Reduction recognizes that substance use is inevitable in a society and that it is necessary to take a public health-oriented response to minimize potential harms.
- *Humane Values:* Individual choice is considered, and judgement is not placed on people who use substances. The dignity of people who use substances is respected.
- *Focus on Harms:* An individual's substance use is secondary to the potential harms that may result in that use. [iv]

What are the goals of harm reduction?

The overarching goal of the harm reduction approach is to prevent the negative consequences of substance use and to improve health. Harm reduction approaches and programming are supported internationally by global institutions such as UNAIDS, United Nations office on Drugs and Crime, and the World Health Organization , and it is seen as a best practice for engaging with individuals with addiction and substance use issues[v].

A frequent misconception of harm reduction is that it supports, or encourages, illicit substance use and does not consider the role of abstinence in addiction treatment. However, harm reduction approaches do not presume a specific outcome, which means that abstinence based interventions can also fall within the spectrum of harm reduction goals. Essentially, harm reduction supports the idea that those with addiction or substance use issues should be treated with dignity and respect and have a wide selection of treatment options in order to make an informed decision about their individual needs and what would be the most effective for them, while also reducing the harms.

References

[i] Thomas, G. (2005) *Harm Reduction Policies and Programs Involved for Persons Involved in the Criminal Justice System.* Ottawa: Canadian Centre on Substance Use.

[ii] Erickson et. al. (2002) Center for Addiction and Mental Health and Harm Reduction. A Background Paper on its Meaning and Application for Substance use Issues. Retrieved from: http://www.camh.ca/en/hospital/about_camh/influencing_public_policy/public_policy_submissions/harm

[iii] Pires, R. et. Al. (2007). *Engaging users, Reducing Harms. Collaborative Research Exploring the Practices and Results of Harm Reduction.* United Way Report. Retrieved from:http://ekonomos.com/wp-content/uploads/2014/03/Harm-Reduction-Report.pdf

[iv] Bierness, D. (2008) Harm Reduction: *What's in a name? Canadian Center on Substance Abuse National Policy Working Group.* Retrieved from: http://www.ccsa.ca/Resource%20Library/ccsa0115302008e.pdf

[v] Marlatt, A. (2011). Integrating Harm Reduction Therapy and Traditional Addiction And Traditional Substance Use Treatment. *Journal of Psychoactive Drugs*. 331:1

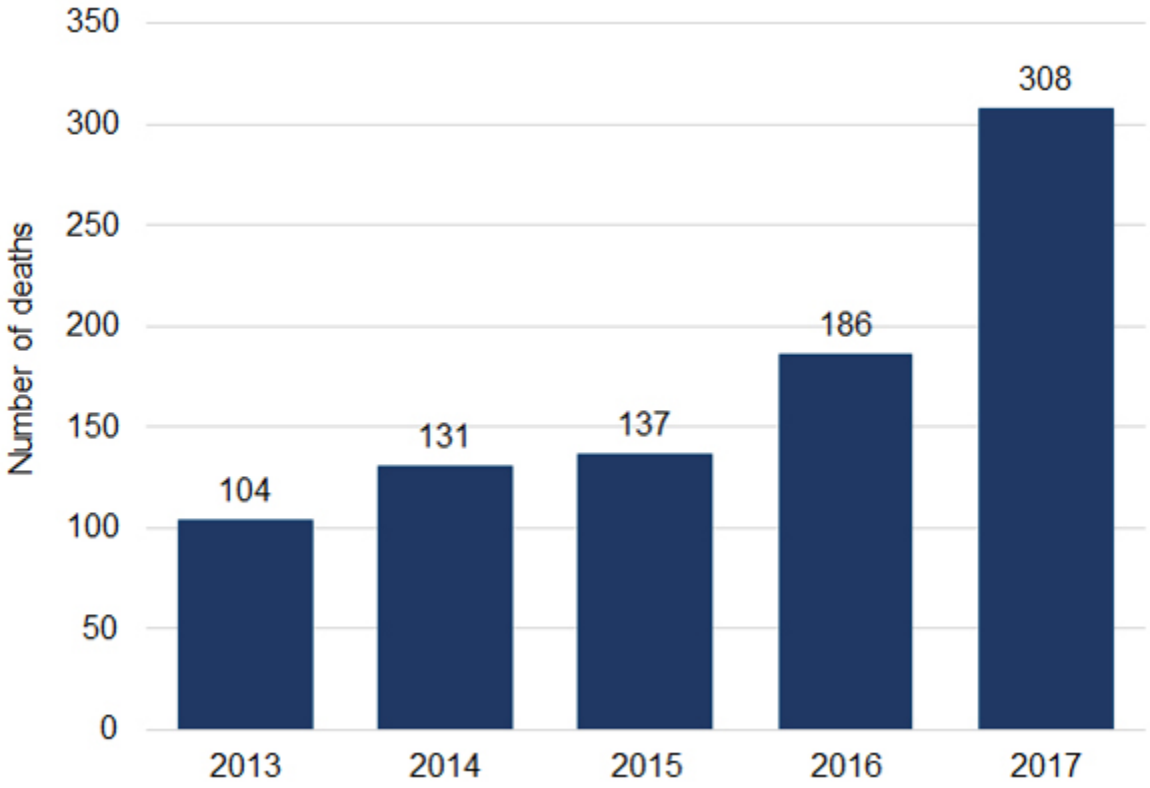
Source: https://ontario.cmha.ca/harm-reduction/

Last Updated: December 14, 2018

In 2017, there were 308 opioid overdose deaths in Toronto. This includes both accidental deaths and suicides combined. This represents a 66% increase in the number of people who died compared to 2016 and a 125% increase compared to 2015. In 2017, one in four opioid overdose deaths in Ontario occurred in Toronto. Preliminary data for 2018 indicate there were 111* opioid toxicity deaths in Toronto in the first six months. This number is expected to increase as the cause of death is confirmed for more cases. *Please see the Data Notes tab for more information on this indicator.*

New data: In May 2017, the Office of the Chief Coroner of Ontario (OCCO) began using a new tool to collect information on deaths caused by opioid overdoses in the province of Ontario. Coroners now use the 'Opioid Investigative Aid' to gather detailed information about people whose deaths were caused by opioids. Analyses of preliminary data from July 1, 2017 to June 30, 2018 are summarized below the following graph.

Annual number of deaths from opioid toxicity causes, Toronto, 2013 to 2017



Source: Public Health Ontario. Interactive Opioid Tool. 2013 to 2017. Accessed on October 23, 2018.

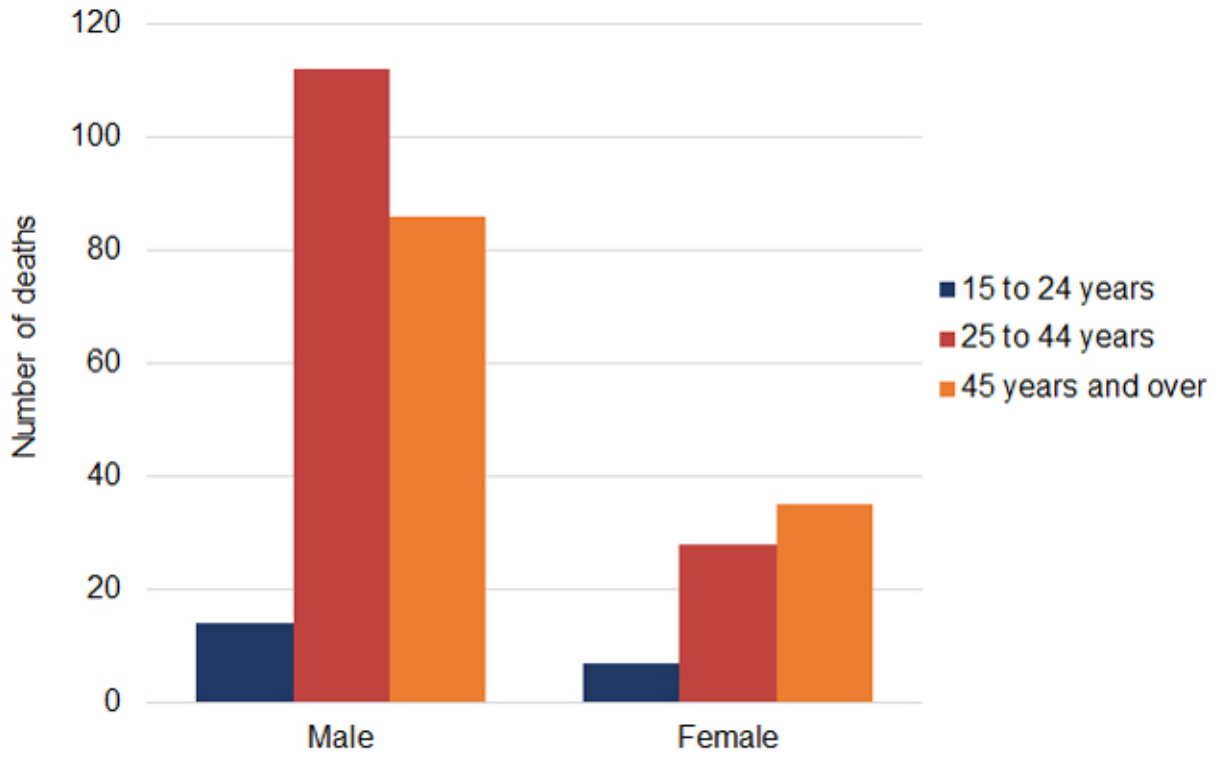
The numbers reported below are preliminary and subject to change. Only cases that are confirmed by the OCCO as opioid toxicity deaths are reported here. As coroners' investigations proceed, it is expected that new cases for this time period will be identified, so these numbers may rise in the coming months.

These data represent confirmed opioid toxicity deaths from July 1, 2017 to June 30, 2018. Please refer to the total number of deaths in 2017 in the figure above for the most recent full calendar year's number (308 deaths).

There were 293* confirmed opioid toxicity deaths among residents of Toronto between July 1, 2017 and June 30, 2018. During this one-year period, the majority of deaths in Toronto (96%) were accidental, compared to 89% in the rest of Ontario. Three percent of deaths in Toronto were classified as suicide, compared to 9% of deaths in the rest of the province.*

Seventy-five percent of accidental opioid toxicity deaths in Toronto from July 2017 to June 2018 were male. Fifty percent occurred among individuals aged 25 to 44 years.*

Accidental opioid toxicity deaths by age group and sex, Toronto, July 2017 to June 2018*



Among accidental opioid toxicity deaths in Toronto from July 1, 2017 to June 30, 2018, the most common ethno-racial groups include:

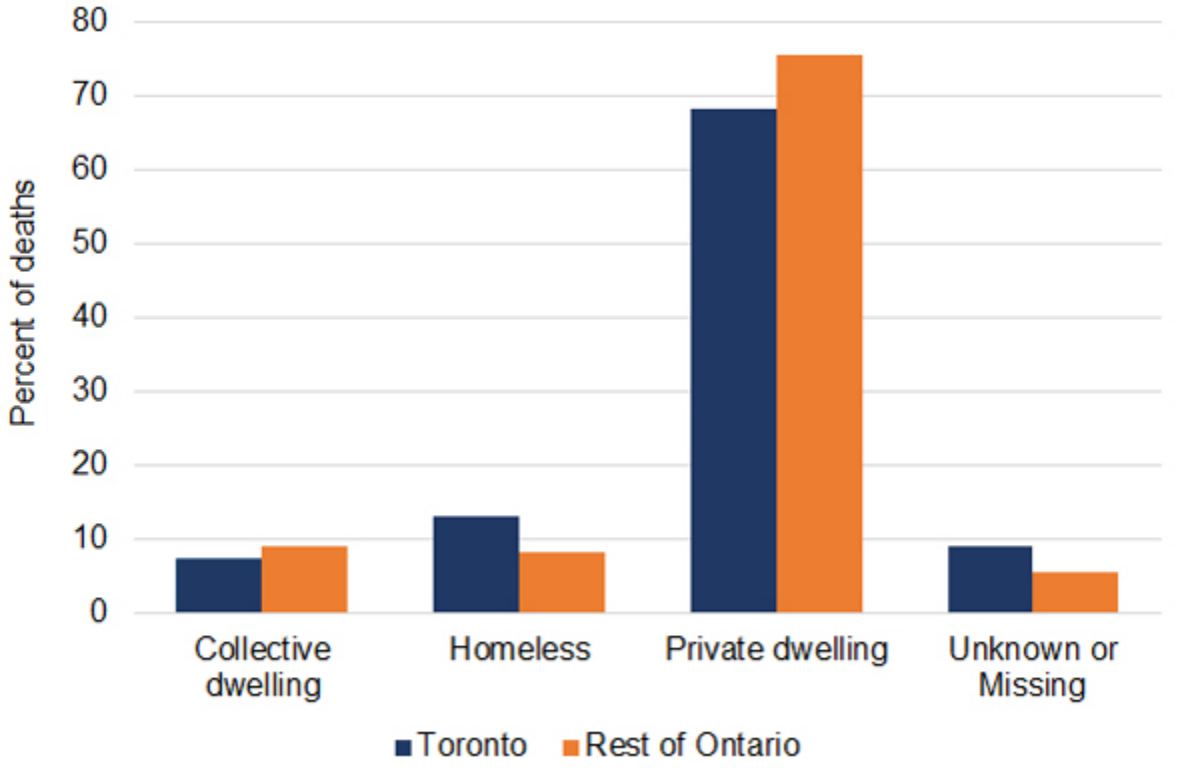
- White (78%)
- Black (6%)
- Indigenous (3%)
- Latin American (2%)*

Forty-four percent of individuals were unemployed at the time of death. However, information on employment status was unknown or missing for 39% of individuals.*

Most (68%) of people who died by accidental opioid toxicity in Toronto resided in a private dwelling at the time of their death. In Toronto, 13% of deceased individuals were experiencing homelessness compared to eight percent in the rest of Ontario. There were no deaths among residents of correctional facilities occurring in Toronto.

Information on living arrangements was unknown or missing for 9% of individuals.*

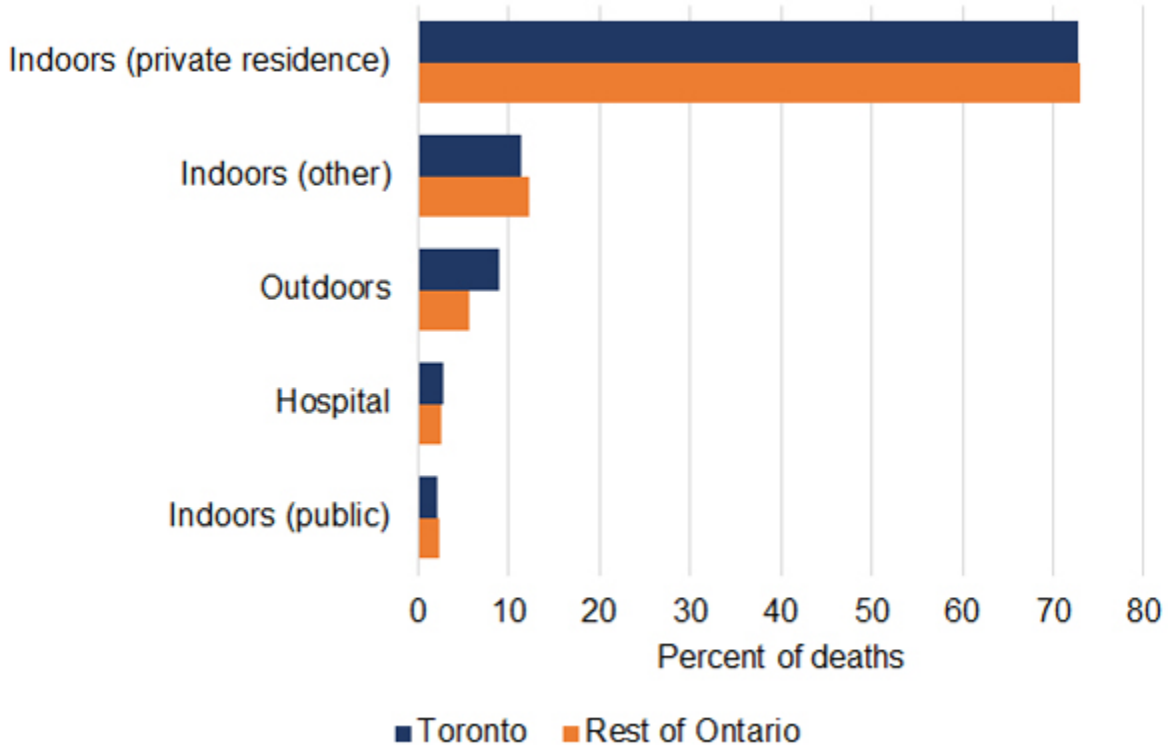
Accidental opioid toxicity deaths by living arrangements of the decedent, Toronto compared to the rest of Ontario, July 2017 to June 2018*



For the majority (73%) of accidental opioid toxicity deaths between July 1, 2017 and June 30, 2018, the overdose occurred in a private residence.

Toronto had a higher proportion of deaths (9%) occurring outdoors compared to the rest of Ontario (6%).*

Accidental opioid toxicity deaths by location of overdose incident leading to death, Toronto compared to the rest of Ontario, July 2017 to June 2018*

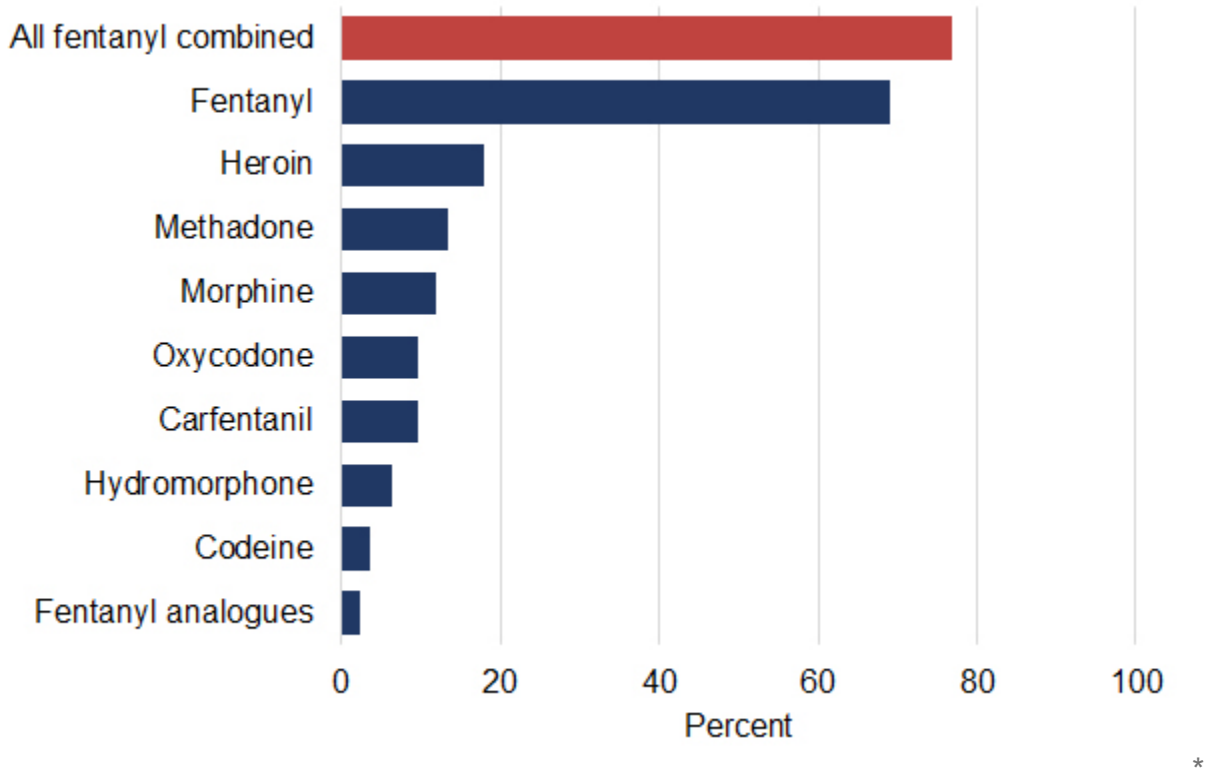


In 65% of accidental opioid toxicity deaths occurring between July 1, 2017 and June 30, 2018 in Toronto, the deceased person was at home at the time of the death. There was evidence of an attempt to resuscitate the deceased individual in 38% of the cases, compared to 47% in the rest of Ontario. Forty-seven percent of deaths occurred without another individual who could intervene at the time of overdose present; however, information was missing in 27% of cases.*

Naloxone use was reported in 17% of accidental opioid toxicity deaths; however, there was missing information in 11% of cases. In 29% of cases where naloxone use was reported, it was administered by bystanders. In 52% of cases, it was used by hospital workers, and in 40% it was by emergency responders.*

Fentanyl was the most commonly reported opioid contributing to death. Fentanyl and its analogues were more common contributors to accidental death in Toronto (77%) compared to the rest of Ontario (69%).*

Accidental opioid toxicity deaths by type of opioid contributing to death, Toronto, July 2017 to June 2018*,†,‡



*

Numbers are preliminary and subject to change.† Drug categories are not mutually exclusive; some deaths are attributed to multi-drug toxicity where a death can include more than one opioid as a cause.‡ The “All fentanyl combined” category includes fentanyl, carfentanil and fentanyl analogues.

Data source: Coroner’s Opioid Investigative Aid, May 2017 to June 2018, Office of the Chief Coroner for Ontario, extracted October 29, 2018.

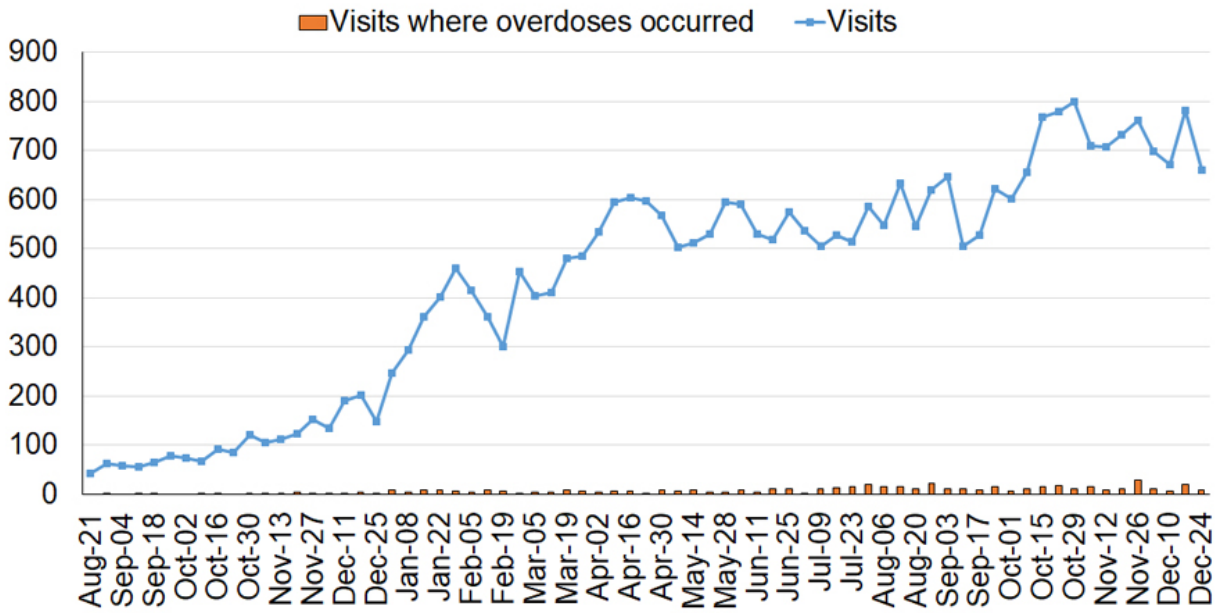
Last Updated: January 04, 2019

On August 21, 2017, Toronto Public Health opened the interim site for supervised injection services at The Works. Services moved to the permanent site on October 30, 2017.

Supervised injection services are health services that provide a hygienic environment for people to inject pre-obtained drugs under the supervision of a trained health care professional. In addition to supervised injection, individuals are provided with sterile injection supplies, education on safer injection, overdose prevention and intervention, medical and counselling services, and referrals to drug treatment, housing, income support and other services. *Please see the Data Notes tab for more information on these indicators.*

As of December 30, 2018, there were 30,968 visits to the supervised injection service. There were 544 visits where an overdose occurred, including 186 visits where the client required naloxone.

Weekly visits to the supervised injection service, The Works, August 21, 2017 to December 30, 2018*,†,‡



Monthly number of visits to the supervised injection visits, The Works, August 21, 2017 to December 30, 2018§

Month	Visits	Visits Where Overdoses Occurred
§Aug-17	89	2
Sep-17	272	3
Oct-17	373	5
Nov-17	514	13
Dec-17	731	11
Jan-18	1,535	36
Feb-18	1,545	22
Mar-18	2,008	27
Apr-18	2,460	23
May-18	2,388	41
Jun-18	2,405	33
Jul-18	2,281	54
Aug-18	2,646	68
Sep-18	2,394	52
Oct-18	3,190	57
Nov-18	3,182	59
§Dec-2018	2,958	54

* Before October 14, 2018, weeks were calculated Monday to Saturday. As of October 14, 2018, the supervised injection service is also open on Sundays, weeks are now calculated Monday to Sunday and are labeled with the Monday of each week period.
† Due to an ongoing review, data currently presented are preliminary and subject to change.
‡ Some weeks include reduced hours due to holiday schedules.
§ August 2017 and December 2018 are not complete months' worth of data. Data are captured for August of 2017 starting on August 21, 2017. Data are captured for December of 2018 up to and including December 30, 2018.

Source: The Works – Toronto Public Health. Supervised Injection Services. Updated January 03, 2018.

Toronto's safe injection sites: your FAQs answered

BY DILSHAD BURMAN
POSTED AUG 14, 2018 3:01 PM EST

LAST UPDATED AUG 14, 2018 AT 7:43 PM EST

- LOCAL

The introduction of safe injection services and overdose prevention sites in Toronto has divided public opinion about the city's drug strategy and how it is dealing with the ongoing opioid crisis.

There are more than 90 supervised injection services around the world, with the first one being opened in Switzerland over 30 years ago.

In 2017, there were 303 opioid overdose deaths in Toronto and the city's Board of Health adopted supervised injections services as part of the city's Overdose Action Plan, adopted in March that year.

With the concept being fairly new to Toronto and deeply polarizing, how these services operate and what goes on inside is a mystery to most.

Broadly, supervised injection services and overdose prevention sites both offer supervised injection and medical care in case of an overdose.

The following is a compilation of the most frequently asked questions about harm reduction services and how they work:

What is a supervised injection service (SIS)?

The City of Toronto describes supervised injection services as “health services that provide a hygienic environment” for people to inject drugs under the supervision of trained staff.

Shaun Hopkins, Manager, Needle Exchange says they are longer term services that offer a wide range of health/harm reduction services including:

- Referrals to drug treatment
- Housing and income support
- Education on overdose prevention and intervention
- Medical and counselling services

People who use the service are also provided with sterile injection supplies, education on safer injecting as well as overdose intervention and prevention services.

Legal approval to operate these services is granted by Health Canada. In Ontario operational funding is provided by the Ministry of Health and Long-Term Care.

What is an overdose prevention site (OPS)?

Hopkins says overdose prevention sites are “temporary, low-barrier services focused on overdose prevention and response.”

They have been broadly implemented in British Columbia and Alberta in response to the opioid overdose crisis. For similar reasons, the Ministry of Health and Long-Term Care launched an overdose prevention site program for Ontario in January.

They provide many of the same services as safe injection sites including supervised injection and the provision of sterile supplies.

The province grants overdose prevention sites approvals to operate for three or six month periods with the potential for extension.

Does an SIS or OPS provide drugs?

No. Supervised injection sites and overdose prevention sites do not supply users with drugs. Anyone availing of the services brings pre-obtained drugs to the site acquired elsewhere or accesses life-saving services when needed.

Are these services legal in Canada?

Yes. Supervised injection services and overdose prevention sites are legal in Canada and require an exemption under Section 56 of the Controlled Drugs and Substances Act (CDSA). Exemptions are granted by the federal Minister of Health. The Respect for

Communities Act passed in 2015 outlines how to apply and the criteria that need to be fulfilled to attain a Section 56 exemption.

What happens inside an SIS?

When a person visits a supervised injection site, they are assessed by staff to make sure they are eligible for the program.

They are then given sterile needles and other equipment along with instructions on safe injecting practices. The person then injects drugs under the supervision of a nurse in a room designated specifically for safe injecting. The nurse intervenes in case of any medical emergencies.

Once the person has injected their drugs, they are taken to a waiting room where they are watched for any negative drug reactions. They are also given information and referrals to other health and social supports at the site or elsewhere in the community.

Won't a service like this enable or encourage more drug use?

According to the City of Toronto, there is no evidence that harm reduction services like supervised injection sites encourage or promote drug use. The availability of supervised injection services does not cause people to start injecting drugs.

The services are used mainly by people who have a long history of drug use and research has found that SIS do not lead to relapse or stop people from quitting.

How many supervised injection sites does Toronto have?

Toronto currently has four supervised injection sites:

- Toronto Public Health, 277 Victoria St.
- South Riverdale Community Health Centre, 955 Queen St. E.
- Fred Victor, 145 Queen St. E.
- Parkdale Queen West Community Health Centre, 168 Bathurst St.

There are also several overdose prevention sites which provide life-saving services that help to reduce the number of overdose deaths across the city. A full list of overdose prevention sites can be found here: Overdose prevention sites in Toronto.

Are safe injection services available 24/7?

No. The locations offering safe injection and overdose prevention services in Toronto have specific hours and some are open all week while others are closed on the weekend.

A full list of locations and the hours they are open can be found here: List of locations and hours of operation.

Does crime noticably increase in neighbourhoods where SISs are located?

Safe injection sites are commonly opened in areas that clearly need them, usually where drug use is already affecting the neighbourhood. The City of Toronto says research shows they do not contribute to more crime in communities where they operate.

Are the police allowed to arrest people using safe injection services?

No. Supervised injection services have an exemption to Section 56 of the Controlled Drugs and Substances Act. The exemption means people who use the services are protected from being prosecuted for drug use within the site.

What are the benefits of safe injection services?

Both international and Canadian research shows that safe injection services not only save lives, but also benefit the community in a number of ways:

- With supervised injecting, the number of drug overdoses and deaths are reduced.
- Provision of clean needles and other supplies helps reduce risk factors that lead to infectious diseases like hepatitis and HIV.
- By reducing the spread of disease, safe injection services help reduce the burden on healthcare services and are therefore cost-effective.
- Safe injection services connect people with other health and social services.
- Safe injection services lead to an increase in the use of of detox and drug treatment services.

Are SIS and OPS programs effective?

“The goal of these services is to prevent overdose deaths, reduce public injection and publicly discarded drug use equipment” says Hopkins. “The evidence shows that they are effective in meeting these goals.”

REPORT FOR ACTION

Toronto Overdose Action Plan: Status Report 2018

Date: June 4, 2018
To: Board of Health
From: Medical Officer of Health
Wards: All

SUMMARY

Toronto continues to be in the midst of an opioid poisoning emergency. Rates of fatal opioid poisoning and emergency room visits related to opioid poisoning are increasing. Fentanyl is prevalent in illicit opioid markets, and has replaced heroin/morphine as the most commonly present opioid in accidental overdose deaths in Toronto.

In March 2017, the Board of Health endorsed the *Toronto Overdose Action Plan*, which provides a comprehensive set of actions to prevent and respond to overdoses, targeted to all levels of government. Over the last year, the Medical Officer of Health and Toronto Public Health staff have worked with other City divisions, and community and institutional partners to implement the Action Plan recommendations. This staff report provides a summary of actions taken over the last year. The report also highlights ongoing efforts, including community dialogues on a public health approach to drug policy in Canada.

While considerable work has been done, the situation remains urgent, and more must be done. Toronto Public Health remains committed to working with our partners to scale up our response to this public health crisis in our community, and enable service providers to implement actions as recommended in the Action Plan.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

1. The Board of Health reinforce with provincial and federal governments the urgency of the opioid poisoning emergency, and the critical need to scale up actions in response.

2. The Board of Health urge the Ministry of Health and Long-Term Care to extend approval of the maximum term for overdose prevention sites from the current six months to a 12-month period.

3. The Board of Health urge the Ministry of Health and Long-Term Care to support urgent implementation of managed opioid programs (i.e. pharmaceutical

heroin/diacetylmorphine and/or hydromorphone), including low barrier options, across Ontario.

FINANCIAL IMPACT

There is no financial impact associated with this report.

DECISION HISTORY

There have been a number of updates on the *Toronto Overdose Action Plan* since its endorsement by the Board of Health in March 2017, including:

On January 22, 2018, the Board of Health approved additional measures to respond to the overdose crisis, including supporting implementation of overdose prevention sites. http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.HL24.4

On October 10, 2017, City Council approved additional urgent measures to respond to the overdose crisis, including those approved by the Board of Health at its September 25, 2017 meeting. http://app.toronto.ca/tmmis/decisionBodyProfile.do?function=doPrepare&decisionBodyId=961#Meeting-2017.CC32

COMMENTS

Drug overdoses in Ontario and Toronto

In 2017, there were 1,261 opioid overdose deaths in Ontario[1], up from the 867 deaths in 2016, and representing a 45% increase. In Ontario, fentanyl or fentanyl analogues were detected in 66% of opioid overdose deaths from May to July and 75% of deaths from August to October. In addition, emergency room visits related to opioid overdoses in Ontario increased from 4,453 in 2016 to 7,658 in 2017, an increase of 72%. In Coroner's data for opioid overdose deaths in Ontario from May to October 2017, non-pharmaceutical opioids were a cause in about three quarters (73%) of deaths.[2]

Data from Toronto Paramedic Services (TPaS) show similar trends for Toronto[3]. Between August 7, 2017 and May 13, 2018 (approximately nine months), TPaS attended 2,186 non-fatal and 139 fatal suspected opioid overdose calls. In the past six months (from November 13, 2017 to May 13, 2018), Toronto emergency departments saw 8,101 visits for substance-related issues, including 1,533 visits for suspected overdoses.

The number of opioid poisoning deaths has increased steadily in Toronto. In 2017, there were 303 opioid overdose deaths. This represents a 63% increase in the number of people who died, compared to 2016 and a 121% increase compared to 2015. In 2017, one in four opioid overdose deaths in Ontario occurred within Toronto.

Summary of key actions to implement the Toronto Overdose Action Plan

Overall response by government:

Over the last year, all orders of government have taken action to save lives, and details related to specific initiatives are outlined in this report. New funding has been targeted to overdose prevention and response measures. The federal government's 2017 budget included $100 million over five years, and $22.7 million in ongoing funding for Canadian Drugs and Substances Strategy initiatives and responses to the opioid poisoning crisis. In 2016, the provincial government announced $222 million over three years for opioid poisoning initiatives. Some of this funding is flowing through Local Health Integration Networks (LHINs). Further, as part of Ontario's 2018 budget, the Province committed $2.1 billion for mental health and addictions. Toronto Public Health (TPH) also increased funding for overdose prevention in 2017, and details are discussed later in this report.

In October 2017, the provincial Minister of Health and Long-Term Care (MOHLTC) established an Opioid Emergency Task Force, including Toronto's Medical Officer of Health (MOH), diverse service providers, and people with lived experience, to advise and inform government responses. The MOHLTC also activated the Ministry Emergency Operations Centre to provide operational coordination during the opioid poisoning emergency. Several LHINs are, or have, developed opioid strategies. The federal government also released a Public Health Emergency Response statement.

In Toronto, Mayor John Tory worked with the Federation of Canadian Municipalities Big City Mayors' Caucus to drive advocacy efforts at a national level, supported by City staff, including staff from TPH. The Chairs of the BOH and the Toronto Drug Strategy Implementation Panel have been strong advocates on the overdose emergency. The MOH and TPH staff have worked with other City divisions, and community and institutional partners to implement the Toronto Overdose Action Plan. Toronto Public Health staff have also promoted action and advocacy through national, provincial and local committees.

Indigenous Overdose Prevention & Response Strategy:

The Toronto Overdose Action Plan recommended a separate Indigenous-led process to develop an Indigenous Overdose Prevention & Response Strategy (IOPRS) specifically for Indigenous people in Toronto. The Toronto Central LHIN funded an Indigenous facilitator to undertake this work with TPH. Working with an advisory group, a process has been designed to capture the input of Indigenous people who use drugs and the service providers who work with them, through interviews, talking circles and focus groups. The consultation phase of this initiative is underway, and will inform the content of the IOPRS.

Naloxone access and distribution:

Access to naloxone has dramatically increased over the past year. Between January 1, 2017 and April 19, 2018, TPH distributed 7,717 naloxone kits to people who use drugs. The provincial government has made naloxone available free-of-charge from participating pharmacies, including 100 pharmacies in Toronto. The Province is now providing nasal naloxone, and a health card is no longer required. In addition, the Province expanded the range of community agencies that can distribute naloxone to

people who use drugs. Toronto Public Health is rolling out this new provincial program in Toronto, and as of March 2018, a total of 33 agencies were enrolled, with more in process. In the first five months of the program, 6,883 kits were distributed to agencies for their clients. The City's Shelter, Support & Housing Administration (SSHA) division applied to have two of their directly-operated shelters participate in this expanded program, and promoted it to their funded agencies.

In January 2018, the MOHLTC announced it would also provide naloxone to fire and police services. Toronto Fire Services has been carrying naloxone since fall 2017, and in February 2018, the Toronto Police Service announced select personnel will carry it.

Some treatment services are distributing naloxone to their clients, and some hospitals have begun distribution of naloxone through emergency departments. The Province has agreed to provide naloxone to hospitals, and charged local public health units with managing this distribution. Toronto Public Health is in the process of training staff at eligible hospitals, and working with them to develop policies and procedures for naloxone distribution. The provincial Ministry of Community Safety & Correctional Services provides everyone leaving an Ontario prison with a wallet card with information on overdose risks, the *Good Samaritan Drug Overdose Act*, and how to get a free naloxone kit. Naloxone is offered to anyone being discharged from a provincial prison who may be at risk of overdose. Naloxone is also available for staff use in all provincial correctional facilities, and training for probation and parole staff is underway.

A key gap in this area is funding for naloxone kits for community service providers to use should one of their clients overdose. More agencies can distribute naloxone to their clients now, but they do not have it available for their own use. Many community services have had people overdose in their agencies and want to have naloxone available onsite for staff to use. Toronto Public Health continues to advocate with the MOHLTC for the provision of naloxone in community agency first aid kits.

Overdose prevention and response training and support:
Toronto Public Health developed and has delivered overdose recognition, prevention and response training, and since June 2017, has trained over 1,886 staff from a variety of City divisions and community agencies. Toronto Public Health has also helped organizations develop overdose protocols, and promoted use of an Organizational Opioid Overdose Risk Assessment tool.

Other City divisions have also taken action to train staff on overdose prevention and response, and some have naloxone onsite at their service locations, including:

- All Toronto Public Library (TPL) branches and locations have emergency overdose kits onsite, including naloxone. A majority of TPL employees have completed overdose awareness training, and many have completed naloxone training, and this training is continuing.
- Parks, Forestry & Recreation (PF&R) customized TPH's overdose prevention training curriculum to meet staff requirements, and continue to deliver this training. To date, 195 staff have been trained, and more training is planned for 2018. PF&R has also equipped Parks Ambassadors, who frequently interact with vulnerable and street-involved people, with naloxone and training.

- Toronto Employment & Social Services (TESS) is working with TPH to train onsite security staff about overdose prevention and response, including naloxone administration. All TESS staff will be made aware that security staff are trained and have naloxone available to administer in case of an overdose.
- Staff in SSHA developed an overdose policy and procedure for all directly-operated shelters and winter respite services, and adapted it into a template to share with community shelters and winter respite sites. They also implemented an initiative providing naloxone in emergency kits at shelters and drop-ins (30 sites in total). Prior to receiving the kits, each agency completed a declaration confirming that staff received overdose training from TPH, and that naloxone policies and procedures were in place at the site.
- Staff in SSHA also developed an implementation plan for shelter services focused on supporting agencies to access overdose and harm reduction training and resources. They also collaborated with TPH to train over 180 City shelter staff (frontline and shift supervisors) in overdose prevention and response. And, they promoted training opportunities and overdose policy and procedure templates to community shelters, drop-in services and other agencies.
- Staff in SSHA also released a survey for all directly-operated and funded shelter, drop-in and winter respite services to identify challenges accessing naloxone, overdose training and resources, to inform further action.
- The SPIDER team in Social Development, Finance & Administration promoted the TPH overdose prevention and response training widely across the city. They also collaborated with TPH to hold a public dialogue about the overdose crisis.

In May 2018, the Medical Officer of Health (MOH) wrote to organizations that deliver first aid training in Toronto encouraging them to add overdose recognition and response training, including naloxone administration, to their first aid training, if they have not already done so. Many employees are required to take first aid training, which provides a useful access point to deliver this life-saving training.

Harm reduction services and outreach:
Harm reduction services, including outreach to people who use drugs, are critical to saving lives. Toronto Public Health prioritized funding for peer-based overdose prevention initiatives under the Toronto Urban Health Fund. In 2017, $796,536 was allocated to 13 harm projects to implement harm reduction services and train 55 peer workers in overdose prevention. Two overdose prevention train-the-trainer sessions were conducted with 39 peer workers completing the training. Further, in fall 2017, TPH allocated an additional $150,000 in one-time funding to expand peer outreach through the five community health agencies already distributing naloxone in Toronto.

Over the last year, TPH expanded their street and mobile outreach services at The Works, targeting areas where overdoses have been occurring most frequently. Currently, there are 45 agencies across Toronto under contract with TPH to provide harm reduction supplies and safer drug use education. The MOH has sent letters to the Executive Directors and Chairs of the Boards of Directors of the agencies that currently distribute harm reduction supplies emphasizing the urgency of responding to the overdose crisis, strategies for enhancing services, and outlining how TPH can support them in expanding their response.

While new investments in harm reduction services have been helpful in the response to the overdose crisis, there is still limited core funding for these services. Toronto Public Health continues to advocate for core funding to harm reduction services to support existing and expanded service delivery to people who use drugs.

In May 2017, SSHA released its *Harm Reduction Framework*. As part of the roll out of this framework, harm reduction has been incorporated into a mandatory module for all new SSHA staff. They also worked with TPH to develop an online module about harm reduction with a specific focus on overdose and naloxone administration for the Toronto Hostel Training Centre's communicable disease course, which is mandatory for all shelter staff. A harm reduction section was also included in SSHA's Home for Good funding applications that requires agencies to outline harm reduction approaches in their services.

Grief and trauma support:
A critical issue is the well-being of people who are impacted by responding to overdoses (often multiple times), and by the grief and trauma caused by the death of loved ones and community members. In 2017, the Toronto-Central LHIN provided one-time funding to the AIDS Bereavement & Resiliency Program of Ontario for a pilot project to develop and deliver trauma and grief supports for people affected by fatal and non-fatal overdoses. There is an ongoing and growing need for this type of support, and TPH continues to advocate for funding for these services.

Good Samaritan Drug Overdose Act:
Some people are afraid to call 911 for medical assistance when an overdose happens because they fear arrest if police attend the call. In response to this issue, the federal government passed the *Good Samaritan Drug Overdose Act* in 2017. This legislation protects people from arrest of certain drug possession charges at an overdose scene. The federal government has been promoting information about the new Act with posters and online information, and recently produced a wallet card. The Canadian HIV/AIDS Legal Network also worked with community partners to develop a wallet card for people who use drugs. The card provides information about the offences that the law does and does not cover. Toronto Police Service officers have been trained on this new law.

Supervised injection services:
Supervised injection services (SIS) are a critical part of the continuum of health services needed for people who use drugs. Over the last few years, the federal government has made the SIS application process easier although it is still a lengthy process. The provincial MOHLTC launched a SIS funding program in fall 2017 to support implementation of SISs across the province, including in Toronto.

Toronto Public Health opened an interim SIS at The Works in August 2017 in response to a surge in overdoses occurring at that time. The permanent SIS opened on November 8, 2017, and operates Monday to Saturday (10am-10pm). Plans are underway to expand services to Sunday. Between August 21, 2017 and April 14, 2018, there were 8,189 client visits. There with 123 visits where an overdose occurred, including 34 visits where the client required naloxone.

Three additional SISs have opened in the last year, including:

- South Riverdale Community Health Centre on November 27, 2017;
- Fred Victor Centre on February 21, 2018; and,
- Parkdale-Queen West Community Health Centre SIS on March 16, 2018.

Overdose prevention sites:
In the present overdose emergency, less formal, urgent approaches are needed and overdose prevention sites (OPSs) can help fill this role. These services are intended as a short-term, emergency response, and can be opened more quickly than a SIS. These services have been operating for some time in B.C. and Alberta.

In August 2017, the Toronto Overdose Prevention Society opened an OPS in Moss Park in response to rising overdoses in that neighbourhood. On November 15th, 2017, the federal Minister of Health announced plans to make it easier for provinces to implement OPSs. On December 7th, the provincial Minister of Health and Long-Term Care announced that he had requested and was granted a federal class exemption to allow OPSs to operate in Ontario for three or six month periods. In January 2018, the MOHLTC launched an OPS program. Given the ongoing nature of this crisis, it is likely that services will be needed over a longer term. It is therefore recommended that that the Board of Health urge the MOHLTC to allow OPSs to operate for a 12-month period.

To support the scaling up of our collective response, TPH staff have been delivering presentations across the city highlighting data on where overdoses are frequently occurring, and promoting strategies for how agencies can enhance their responses to the crisis. Toronto Public Health staff have also supported agencies contemplating operating an OPS, including help with the application process. Further, TPH staff have partnered with SSHA staff to facilitate conversations with shelter and housing providers about implementing or enhancing harm reduction services, including OPSs.

Several community organizations in Toronto have applied to operate an OPS. Overdose prevention sites have opened at St. Stephen's Community House and the Regent Park Community Health Centre. The OPS operated by the Toronto Overdose Prevention Society in Moss Park has received provincial approval and funding, and will be moving to an indoor location in the neighbourhood soon. Street Health has also received approval to operate an OPS, and will be opening in the near future. A fifth OPS has been approved for Toronto, and more details on this location are expected soon.

Drug checking services:
Toronto Public Health staff are working with the Centre for Drug Policy Evaluation, Toronto SISs and hospital laboratories on a drug checking project for Toronto. The project will allow people using SISs to test samples of illicit drugs so that they can make informed choices about their drug use based on the results. Funding for this project has been secured from the federal Substance Use & Addiction Program, which has enabled the project to get underway. The group is also seeking research funding for this project.

Health Canada has amended their policies to support drug checking projects applying for exemptions under the *Controlled Drugs and Substances Act*. A federal exemption is needed to protect staff and clients from drug possession offences. As the Toronto drug checking project will operate at existing SISs, an amendment to their existing federal exemption is all that is required.

The MOHLTC is providing fentanyl test strips to all SISs and OPSs operating in Ontario so that drugs may be checked for fentanyl. There have been some issues with the testing process for these strips that have now been resolved, and use of the test strips will begin soon**.**

Health Canada's Drug Analysis Service, which analyzes seized drug samples for law enforcement agencies, began publishing quarterly results of the substances most frequently found in drug samples. Information for 2016 and 2017 is posted online, nationally and by provinces/territories.

Substance use treatment:
Access to on-demand treatment was a key recommendation in the Toronto Overdose Action Plan, and new investments have been made in treatment over the last year. The federal government has allocated $5 billion over 10 years to provinces and territories for mental health and addictions, and while details are not yet available, it is expected that some of this funding will go to treatment. The provincial MOHLTC has allocated new resources for substance use treatment, and chronic pain. The new funding has resulted in six Rapid Access to Addiction Medicine (RAAM) clinics in Toronto, which can quickly start someone on opioid agonist therapy (OAT), and link them with a physician for ongoing support. The TC-LHIN is funding an additional Nurse Practitioner and seven new Registered Nurses to support the five hospital-affiliated withdrawal management services in Toronto. In addition, permanent provincial funding has been secured for a much needed program for lesbian, gay, bisexual, transgender, two-spirit and queer (LGBTTQ) youth at Breakaway Addiction Services.

Staff at TPH are working with community and health stakeholders on strategies to support faster implementation of new therapies to substitute toxic illicit opioids with safer, pharmaceutical opioids. In fall 2017, TPH staff worked with the Centre for Addiction & Mental Health and others to deliver a webinar on supervised injectable OAT. In April 2018, TPH hosted a stakeholder meeting on managed opioid programs (MOPs), which provide diacetylmorphine (pharmaceutical heroin) and/or hydromorphone to people who are regular opioid users. The group identified a number of barriers to the implementation of MOPs in Toronto, and discussed next steps.

Toronto Public Health is exploring the potential to expand their existing methadone and Suboxone™ program to include prescription hydromorphone. This involves learning from the experience of MOPs operating in Vancouver and Ottawa. In addition, TPH is part of a group of researchers and service providers that have applied for funding for a research study to look at the preferences of people who use drugs with regards to managed opioid programs.

The federal government has also made a regulatory change so that prescribers no longer need an exemption under the *Controlled Drugs and Substances Act* to prescribe methadone. They have also reduced barriers to prescribing diacetylmorphine (pharmaceutical heroin) by allowing programs outside of hospitals, and allowing Nurse Practitioners to prescribe. However, there are other regulatory barriers that prevent access to this treatment in Canada, including strict importation and program delivery requirements.

The Canadian Research Initiative in Substance Misuse produced a national clinical practice guideline[4] for opioid use disorder that may reduce barriers to traditional OAT (i.e. methadone, Suboxone™). The guidelines include an urgent call for action at multiple levels to reduce barriers to diacetylmorphine and/or hydromorphone treatment. There are barriers offering this treatment in Toronto, including funding. It is therefore recommended that the BOH urge the MOHLTC to support urgent implementation of managed opioid programs (i.e. pharmaceutical heroin/diacetylmorphine and/or hydromorphone), including low barrier options, across Ontario.

Monitoring overdose information:
Toronto Public Health has dedicated resources to monitoring information about opioid poisonings, and reporting out to the community. The Toronto Overdose Information System is an online tool that includes data on TPaS overdose calls, hospital emergency room visits, opioid overdose deaths, and visits to the TPH SIS at The Works. In March and April 2018, TPH released more detailed information about where overdoses are happening across the city, including at a neighbourhood level and by major intersections. A map of TPaS calls by city area will be posted monthly.

Real-time monitoring related to drugs and drug poisonings continues to be challenging because of how and when information is collected. People who use drugs and harm reduction service providers continue to share information informally through their networks. The TPH/community collaborative ReportBadDrugsTO.ca website has been revised to allow people to anonymously report overdoses, and this information is provided back to the community. Toronto Public Health also continues to collaborate with community partners to send out drug alert notices, as appropriate.

Public awareness and education:
Information about overdose prevention and response is needed for many audiences. While TPH is not aware of any overdose incidents in secondary schools, there has been concern about potential overdoses among youth. In fall 2017, the MOH sent information to all school boards in Toronto about what they could do to help prevent and respond to potential overdoses, and provided information to share with parents and caregivers. The MOH also sent similar information to all college and university registrars in Toronto with information to send out to students. Local school boards and post-secondary institutions haven taken action. For example, George Brown College is developing a protocol that will allow trained staff to administer naloxone. In February 2018, the Toronto District School Board announced that all secondary schools will have naloxone onsite, and staff will be trained in overdose prevention and response.

Provincial and federal governments have produced public education materials, including posters, to inform people about overdose risks. The federal government has also provided online information about the role of stigma in substance use and overdose. Toronto Public Health is expanding public education and launched an anti-stigma campaign on May 19, 2018 as a part of our ongoing overdose prevention and response efforts. The anti-stigma campaign aims to help start conversations about substance use. This campaign focuses on showing people how they can reduce the stigma and discrimination associated with drug use by changing our language to support people in a compassionate and respectful way, which is critical to saving lives. The creative

material from the anti-stigma campaign was adapted with permission from British Columbia's Stop Overdose B.C. campaign launched by the B.C. Ministry of Mental Health and Addictions earlier this year. The anti-stigma campaign will appear online, in TTC bus shelters, stations and subway cars, in Toronto Public Libraries and recreation centres until June 17, 2018.

Public health approach to drug policy:
The Toronto Overdose Action Plan recommended that TPH undertake a community dialogue on what a public health approach to drug policy should look like for Canada. This action came in response to a strong theme raised in the community consultations for the Toronto Overdose Action Plan calling for decriminalization or even legal regulation of drugs as part of the solution to the overdose crisis. Staff at TPH have worked with a diverse steering committee on this initiative, including development of a discussion paper and accompanying fact sheets. Toronto Public Health launched this community dialogue on May 9, 2018. A dedicated website provides information on how the public can get involved, including participating in one of two community sessions, and an online survey. Staff will report to the BOH on this issue, including the results of the community dialogue, in the summer.

Continuing efforts:
The past year has seen significant action and mobilization to prevent and respond to the opioid poisoning emergency that is affecting Toronto and other communities across Canada. The actions result from a willingness to work together and a strong commitment to respond to this public health crisis. While it is important to recognize the efforts and action taken to date, the situation remains urgent, and more must be done. Toronto Public Health remains committed to working with our partners to save lives and improve the health and well-being of people who use drugs.

CONTACT

Jann Houston, Director, Strategic Support, Toronto Public Health
Phone: 416-338-2074, Email: jann.houston@toronto.ca

Susan Shepherd, Manager, Toronto Drug Strategy Secretariat, Toronto Public Health
Phone: 416-338-0923, Email: susan.shepherd@toronto.ca

SIGNATURE

Dr. Eileen de Villa
Medical Officer of Health

References

1 Public Health Ontario. Opioid-related morbidity and mortality in Ontario. May 23, 2018. Retrieved May 25, 2018 from: http://www.publichealthontario.ca/en/dataandanalytics/pages/opioid.aspx#/trends

2 Office of the Chief Coroner for Ontario. *Opioid Mortality Data, January-October 2017*. February 9, 2018.

3 Toronto Paramedic Services (2018). Toronto Overdose Information System (TOIS), Toronto Public Health. May 15, 2018. www.toronto.ca/health/overdosestats

4. Julie Bruneau, Keith Ahamad, Marie-Eve Goyer, Ginette Poulin, Peter Selby, Benedikt Fischer, T. Cameron Wild, Evan Wood. *Management of opioid use disorders: a national clinical practice guideline*. CMAJ March 5, 2018 190 (9) E247-E257; DOI: 10.1503/cmaj.170958. Retrieved April 6, 2018: http://www.cmaj.ca/content/190/9/E247

Harm Reduction Sites in Toronto

January 2019

Location	Approval Date	Expiry Date	Exempted Services[1]	Status
Fred Victor Centre Site (Fred Victor Centre) • **145 Queen St E**	February 20, 2018	February 28, 2019	• Injection • Peer assistance evaluative pilot	Currently offering services
Parkdale Queen West Community Health Centre (Parkdale Queen West Community Health Centre) • **168 Bathurst St**	March 5, 2018	March 31, 2019	• Injection • Intranasal • Oral	Currently offering services
South Riverdale Community Health Centre (South Riverdale Community Health Centre) • **955 Queen St E**	November 30, 2018	November 30, 2021	• Injection • Intranasal • Oral • Peer assistance evaluative pilot	Currently offering services
The Works (Toronto Public Health) • **277 Victoria St**	October 31, 2018	October 31, 2021	Injection	Currently offering services

[1] **Exempted services are services available at this site. Exempted services may not all be currently offered.**

In addition to these active sites, Health Canada is reviewing applications for five further sites in Toronto:

Proposed site (Applicant)	Site Address	Date received by Health Canada	Status of Health Canada decision process
Moss Park Overdose Prevention Site (South Riverdale Community Health Centre)	134 Sherbourne St	August 27, 2018	Review Stage Awaiting key information before decision can be taken
Parkdale Supervised Consumption Site (Parkdale Queen West Community Health Centre)	1229 Queen West St	December 14, 2018	Screening Stage
Regent Park Community Health Centre Overdose Prevention Site (Regent Park Community Health Centre)	465 Dundas St E	September 6, 2018	Review Stage Awaiting key information before decision can be taken
St. Stephen's Community House (St. Stephen's Community House)	260 Augusta Ave	September 26, 2018	Review Stage Awaiting key information before decision can be taken
Street Health (Street Health)	338 Dundas St E	September 20, 2018	Review Stage Awaiting key information before decision can be taken

Screening:

The applicant's submission has been received and is being examined to verify whether it contains sufficient information for Health Canada to review the application.

Review:

The application is thoroughly examined to determine whether the information is complete and clear. When the application is deemed complete, the applicant is notified that the application has been deemed complete. Health Canada will make a final decision after this stage.